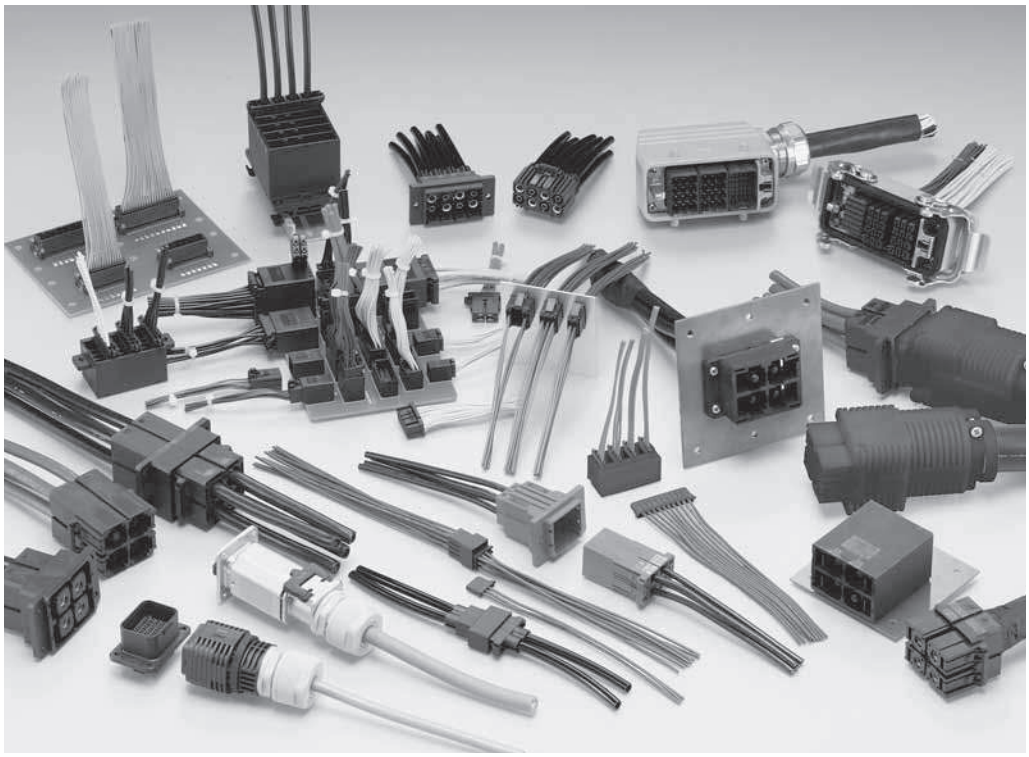
Dynamic Series Connectors

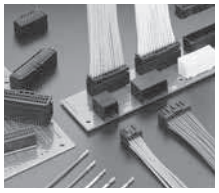
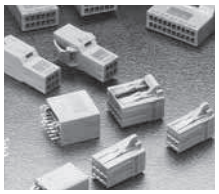
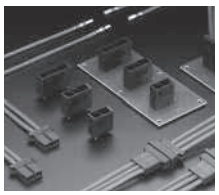
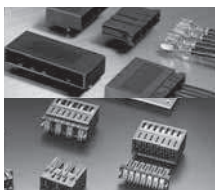


Features

- Connector systems designed for exclusive use with I/O and power circuits in the power and control boards of heavy electric systems and FA equipment, process computers, FA computers, PCs, NCs, servodrivers, servomotors, inverters, switching power supplies, etc.
- Consists of wire-side connector and board-side connector.
- Diverse housings are available to meet most specific applications.
- With contacts standardized, the tool types used can be reduced. Termination can be automated and field maintenance simplified.
- As contacts can be shared, connector quality is stabilized.
- Standardization of contacts leads to stabilization of management and supply of related parts.
- To prevent human errors in termination, a common identification mark is impressed on handtools and contacts.
- Housing color and design are coordinated.

Dynamic Series Connectors

Dynamic Series Line-up

Name of series				Mechanical												
				Mounting conditions												
					Wire to Board											
					DIP		SMT									
Series	Image of typical product	Designation	Type	Wire to Wire	Horizontal	Vertical	Horizontal	Vertical	Panel Mount	DIN rail	Tap	Junction	Drawer	Board to Board	No. of Pos. [P]	
1000 (P354-367)		1100S	Standard Type	–	–	○	–	–	–	–	–	–	–	–	4,8,10	
		1100D	Standard Type	○	○	○	○	–	○	–	–	–	–	–	10,20,22,26,28, 30,32,34,40	
		1200S	High-Voltage Type	○	○	–	–	–	–	–	–	–	–	–	2	
		1200D	High-Voltage Type	○	○	○	○	–	○	–	–	–	–	–	4,6,8,10,12,16,20	
		1500T	Module Type	–	○	○	–	–	○	○	–	○	–	–	3,6,9,10,12,34,36	
2000 (P368-376)		2100S	Standard Type	○	○	○	–	–	○	–	–	–	–	–	3	
		2100D	Standard Type	○	○	○	–	–	○	–	–	–	–	–	6,8,12,16,20	
		2100M	Multi-position drawer type	○	–	○	–	–	○	–	–	–	○	–	50	
		2600D	Combined power and signal line type	–	○	–	–	–	–	–	–	–	–	–	48	
		2800	HTS Module Type	○	–	–	–	–	○	–	–	–	–	–	30	
3000 (P377-404)		3100S	Standard Type	○	○	○	○	○	○	–	–	–	–	–	3,4,5,6,8,10	
		3100D	Standard Type	○	○	○	–	–	○	–	–	–	–	–	6,8,10,12,16,20	
		3100M	Module Type	–	○	○	–	–	–	–	–	–	–	–	6	
		3200S	High-Voltage Type	○	○	○	–	–	○	–	–	–	–	–	2,3,4,5,6	
		3200M	High-Voltage Type	○	○	○	–	–	○	–	–	–	○	–	6,10,12,20	
		3200T	High-Voltage Type	–	–	○	–	–	–	–	–	–	–	–	9	
		3400F	Skyscraper Type	–	–	○	–	–	–	–	–	–	–	–	12,20	
		3500D	Module Type	○	○	○	–	–	○	–	–	–	–	–	2,4,6,12,20	
		3700	For Motor	–	–	–	–	–	○	–	–	–	–	–	6	
		3100/3200	Dyna-Tap	–	–	–	–	–	–	–	○	–	–	–	18,24	
		3800	HTS Module Type	○	–	–	–	–	○	–	–	–	–	–	12	
4000 (P405-411)		4200S	Standard Type	○	○	○	–	–	○	–	–	–	–	–	2,3,4	
		4200M	Module Type	○	–	–	–	–	○	–	–	–	–	–	6	
		4800	HTS Module Type	○	–	–	–	–	○	–	–	–	–	–	8	
5000 (P412-425)		5200S	Standard Type	○	○	○	–	–	○	–	–	–	–	–	2,3,4,6	
		5200M	High-Current Type	○	○	○	–	–	○	–	–	–	–	–	4,6,8	
		5200Mα	High-Current Type	–	–	○	–	–	–	–	–	–	–	–	4	
		5300S	Reverse housing type	–	–	–	–	–	○	–	–	–	–	–	3	
		5300D	Reverse housing type	–	–	–	–	–	○	–	–	–	–	–	4	
		5200	Dyna-Tap	–	–	–	–	–	–	○	○	–	–	–	12,20	
			Dyna-Clamp kit	○	○	○	–	–	○	–	–	–	–	–	3,4	
		5800	HTS Module Type	○	–	–	–	–	○	–	–	–	–	–	4	
		DZ-5200	Board to Board Type	–	–	–	–	–	–	–	–	–	–	○	5,7	
		DZ-5200	Board to Board Type	–	–	–	–	–	–	–	–	–	–	○	3,4	
Special Products			Dynamic Pneumatic Connector	○	–	–	–	–	○	–	–	–	–	–	2,8	
			Multiple Enclosure Connector	–	–	–	–	–	○	–	–	–	–	–	15,24,32	

■Product specifications may be modified for improvements without advanced notice. Some products may go out of production. **Be sure to request drawings and product specifications when considering using a product.**
Be sure to request these materials, especially to confirm small differences in installed dimensions when mounting parts on a circuit board.

■**Products are sold in lot sizes.** Contact our sales department for the latest information.
Unless otherwise specified, all measurements in this catalog are in millimeters (mm).
The AWG values in this catalog are the values for when using an applicator.
When doing work by hand, refer to the user's manual.

Dynamic Series Connectors

			Electric				Safety Specifications		
Rows	pitch (mm)	Wire Range	Maximum Current Rating	Maximum Voltage Rating	Dielectric Withstanding Voltage	Durability	UL CSA TÜV	IP protection level	Reference page
1	2.0	30 ~ 22	3	125	700 (1000)	Gold 50 Tin 30	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R9950679		352
2									353~355
1	2.5	30 ~ 18	5	250	1100 (1500)				356
2									357~359
3,4	3.5								360,361
1	2.5	28 ~ 18	5	250	1500	500	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R9950679		366
2									367,368
2		20	2.6	250		500			369
3	D-2(2.5) D-3(3.81)	D-2(28 ~18) D-3(28 ~14)	D-2(3.2) D-3(7.5)						370
6	3.75	28 ~ 18	5						426
1	3.81	28 ~ 14	15	250	1500	Gold 500 Tin 100	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R9151488 (VDE0627)		376~379
2	3.81								380,381
2	3.81								382
1	5.08			600	2200				383~385
2	5.08								386~390
3	5.08								391
4	3.81			250	1500				392
2	5.08			600	2200				393,394
1	3.81			250	1500				395
3,6	3.81			250	1500				397,398
4	6.5			600	2200				427
1	6.35	16 ~ 12	24	600	2500	25	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R50084673		403,404
2	6.35		24	600	2500				405
4	6.35		24	600	2500				427
1	10.16	16 ~ 10	30	630	3000	Gold 0.76μ50 Gold 0.38μ25	UL : File No. E28476 CSA : Report No. LR7189 TÜV : License No. R9650368	10	410,411
2								10	412,413
2		20 ~ 8	45			Silver 25		10	419
1		16 ~ 10	30			Gold 0.76μ50 Gold 0.38μ25		20	414
2								20	
3	10.16								415
1,2	10.16								416,417
2	12.0							10	427
1	5.08	–	20	250	2200	15			421
	10.16		30	600	4000				
1,2	8.5	Ø4/6 Tube	Refer to product specification 108-78406				–	–	431~433
4,8	See other series		See other series				See other series		434~

Dynamic Series Connectors

Guideline for selecting plating (These guidelines apply to the D-3000 series only. Please note that they may not be suitable for other products.)

Whether to use gold or tin plating varies depending on the voltage, current, environment (vibration, temperature, gas, etc.), number of contact positions, and other variables. Gold plating is recommended for general industrial machinery, but in reality cost considerations are also a factor. To help in this selection, these guidelines have been put together for the Dynamic Series as a reference in the selection process.

1) Selection based on voltage and current

	Gold-plated	Undetermined zone	Tin-plated	No plating (reference)
Voltage	Below 3 V	3 to 30 V	30 to 100 V	Over 100 V
Current	Below 1 A	1 to 10 A	Over 10 A	Over 0.1 A

(Table - 1)

Table 1 shows us that gold should always be used for applications under 3 volts and 1 ampere. When the voltage is over 30 and amperage is over 1, tin plating can be used. The most difficult area to make a selection is in the undetermined zone. In this zone either gold or tin plating can be used, but the environment causes extensive variation. In a clean environment tin plating is acceptable. However, use gold plating if the environment is bad, such as in high heat or humidity, the presence of gas is possible, vibration is extreme, mating and demating are excessive, or other factors.

2) Selection based on number of contact positions (selection based on contact pressure)

Selecting based on the number of contact positions is often forgotten. The higher the contact pressure the more possible it is to use tin plating or no plating, regardless of the voltage or current mentioned in section 1. However, if they are too high, mating and demating become impossible so the connector function is lost. To get around this, we can drive the voltage and current down into a workable zone, but then we run into the problem of oxidation. Then, to prevent oxidation, we use tin (approximately 2.94 N optimum contact pressure) or gold (approximately 1.18 N) plating. But, the contact pressure increases proportionally as we increase the number of contact positions, causing mating and demating to become difficult. Generally speaking, given a 39.2 N limit for mating/demating by hand, it becomes difficult without using leverage, such as a lever or jack screw.

The Dynamic D-3000 series has a maximum of 20 contact positions. That means the contact pressure with tin plating is 3.92 N, and with gold plating is 2.45 N and 1.47 N (high pressure types and standard types are available for some applications).

For instance, given 3.92 N for tin plating, we can calculate insertion and extraction forces of 58.8 N and 49.0 N, which is difficult because it exceeds the range for barehanded work.

Once we understand this, we see that as contact positions increase we must use gold plating regardless of the voltage and current conditions mentioned in section 1.

Table 2 shows the applicable maximum number of contact positions as a reference.

Contact pressure	Applicable maximum number of contact positions
(1) Gold plating Standard contact pressure: 1.47N	20
(2) Gold plating High contact pressure: 2.45N	20
(3) Tin plating High contact pressure: 3.92N	12

(Table - 2) Note: Insertion force and extraction force are not the same as contact pressure.

3) Environment (vibration, humidity, gas, etc.)

Although the environment was discussed in section 1 about voltage and current, it is summarized again here.

Use gold plating in a bad environment, particularly for high vibration or heat, the presence of gas or other bad conditions.

Gold is a noble metal. This means that gold does not react easily with other materials, which means that its surface does not oxidize or tarnish when exposed to air. Of all metals, only gold has this property. Other metals, noble metals except gold, such as platinum or rhodium for example, do not produce absolutely no oxide film. This is a very important property for contacts. In consideration of this, there is no better material than gold plating if the environment is bad.

Also, if vibration is an issue, there is the risk of fretting corrosion (micro-abrasion). Always use gold plating. If possible, high-contact pressure connectors are recommended.

Dynamic Series Connectors

Guideline for selecting plating (These guidelines apply to the D-3000 series only. Please note that they may not be suitable for other products.)

4) Other considerations

■Contact between dissimilar metals

Combining tin and gold tends to create a lot of ionization, producing electrolytes from condensation so corrosion is likely to occur. This combination is not recommended because it could produce worse results than a combination of just tin.

The above information has been summarized in "Plating selection at a glance" for your convenience.

■Being consistent within an application

We recommend that, as much as possible, the same type of plating be used within an application. This is to prevent connections being made between dissimilar metals, gold and tin as mentioned above, during assembly and maintenance. And for the same reason, we recommend using the same plating in factories or workplaces where assembly or harness production is done.

★★★ Best
★★ Good
★ Usable
— Not usable

Plating selection at a glance

Voltage/current	Application	Tin-plated	Gold-plated			
			0.38μ		0.76μ	
			Standard pressure	High pressure	Standard pressure	High pressure
Below 3 V Below 1 A	Standard specifications	—	★★	★★	★★★	★★★
	Vibration	—	★	★★	★	★★★
	Bad environment	—	★	★	★★	★★★
	Extensive mating/unmating	—	★★	★	★★★	★★
	Many contact positions	—	★★★	★★	★★★	★★
3 to 30 V 1 to 10 A	Standard specifications	—	★★	★★	★★★	★★★
	Vibration	—	★	★★	★	★★★
	Bad environment	—	★★	★★	★★★	★★★
	Extensive mating/unmating	—	★★	★	★★★	★★
	Many contact positions	—	★★★	★★	★★★	★★
Over 30 V Over 1 A	Standard specifications	★★	★★★	★★★	★★★	★★★
	Vibration	—	★★	★★★	★★	★★★
	Bad environment	—	★★	★★	★★★	★★★
	Extensive mating/unmating	—	★★★	★★	★★★	★★
	Many contact positions	—	★★★	★★	★★★	★★

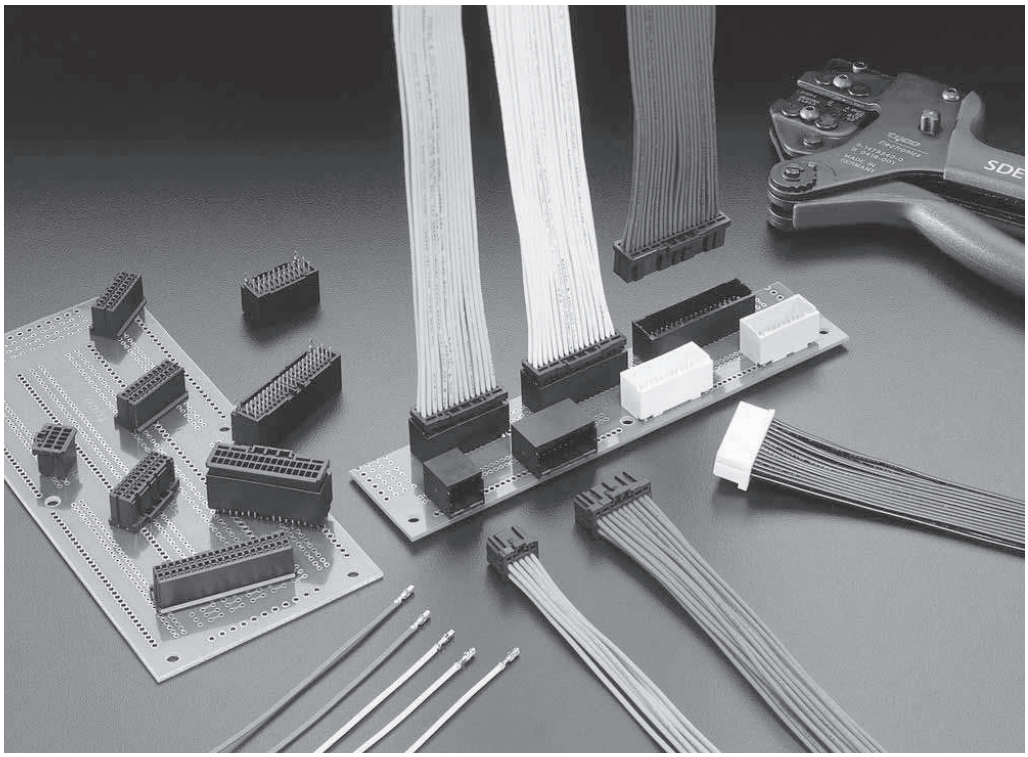
The above table is basically for industrial machinery, and was made with a wide margin. This table is not applicable for every situation as there are many combinations depending on the application. It is intended to be used as a guideline only.

Dynamic Series Connectors

D-1000 Series

Series profile

This is the smallest series in the Dynamic series. It is the perfect connector for highly reliable signal lines in industrial machinery. There are three pitches available, standard 2.0 mm, high voltage 2.5 mm, and a 3.5 mm branching type, depending on line size, various voltages and other factors. In the future this lineup will be expanded accordin
demand.
A tin plated type that maintains high reliability has been made available in consideration of cost performance. Using this type can help reduce costs, depending on the environment and other conditions.



Features

Feature 1 (Changeable die set crimping hand tool)
Crimping hand tool is changeable die set structure. It can reduce the lead time for delivery, offer minimal installation tooling cost. This tooling system will evolve to other Dynamic product, D-2000, D-3000, and D-4000 series in the future plan.

Feature 2 (Wide range applicable cable)
D-1000 series receptacle and tab contact have wide applicable wire range that can apply for #30 through #18 with 2.2mmϕ of outside diameter maximum. It means you can use it for electrical cabinet without special thinking.

Feature 3 Extensive series lineup
A) Housing products
D-1000 series consists of D-1100 series for 2.0mm pitch center line, D-1200 series for 2.5mm pitch center line as standard type. In addition, there also lines up D-1500 series for 3.5mm pitch sensor application or branch connection of power line.

B) Contact products
D-1000 series has gold plating contact as standard products and also Tin plating contact for economical market needs. You can choose the contact depending on specification, application, quality level and cost so that you can utilize D-1000 series at several places in equipment.

■Other feature (Basic Dynamic series features)
- ●Header connector and tab connector have enough length from the tip of contact to top of its housing. It prevents contact from bending that sometimes happens when receptacle mating to tab connector, because it begins the first time for contacts to start connects when housings align each other.
- ●D-1000 has housing lance structure. Without contact lance, it is expected to avoid contact lance broken in terminal process handling.
- ●Clear identification of circuit number provides correct wiring.
- ●Metal retention leg assembled tab header prevents from unexpectedly cable tension.
- ●Housing lock design is offering no wire scratching.

Dynamic Series Connectors

D-1000 Series Specifications and Standards

Performance Specifications

Item \ Series	D-1100	D-1200	D-1500
Pitch	2.0mm	2.5mm	3.5mm
Voltage Rating	125V AC/DC	250V AC/DC	250V AC/DC
Current Rating (Max)	Pos.:3A When using AWG22 wire	Pos.:5A AWG18 wire	Pos.:5A
Contact Resistance	20mΩ Max. (Final)		
Dielectric With-standing Voltage	1,000V AC	1,500V AC	1,500V AC
Temperature Range	−55˚C~+105˚C		

Positions/wire size/current rating

D-1100/1200/1500 Series

No. of Pos.	Wire Size (AWG)						
	18	20	22	24	26	28	30
1	5	4	3	2.5	2	1.5	1
2~20	3.5	2.7	2.5	2	1.5	1	0.8
21~40			2	1.5	1	0.8	0.5

Specifications and Instruction Sheet

Product Specification		108-78268 (Gold plated)
		108-78298 (Tin plated)
Applicatio n Specification		114-5377
Hand Tool Instration Sheet	Hand Tool Part Number: 2119144-1	408-10414
	Hand Tool Part Number: 2119141-1	408-10414
	Hand Tool Part Number: 2119143-1	408-10414
	Hand Tool Part Number: 2119142-1	408-10414
Extraction Tool Part Number: 1891526-1		411-78241

Material and Finish

Description	Material	Finish
Receptacle Contact Tab Contact	Copper alloy	Gold plated(0.38 μm) over Nickel plated(1.27 μm)
PCB Tab Post	Copper alloy	Gold plated(0.38 μm)over Nickel plated(1.27 -1 μm) Tab Post Tin plated(2.0 μm)
Housing	UL94V-0, Grass filled thermoplastic Polyes-ter (PBT)	

Safety Specifications

Don't fail to obtain Instruction Sheets when you choose to use these tools. Orders can be placed through our online catalogs also.

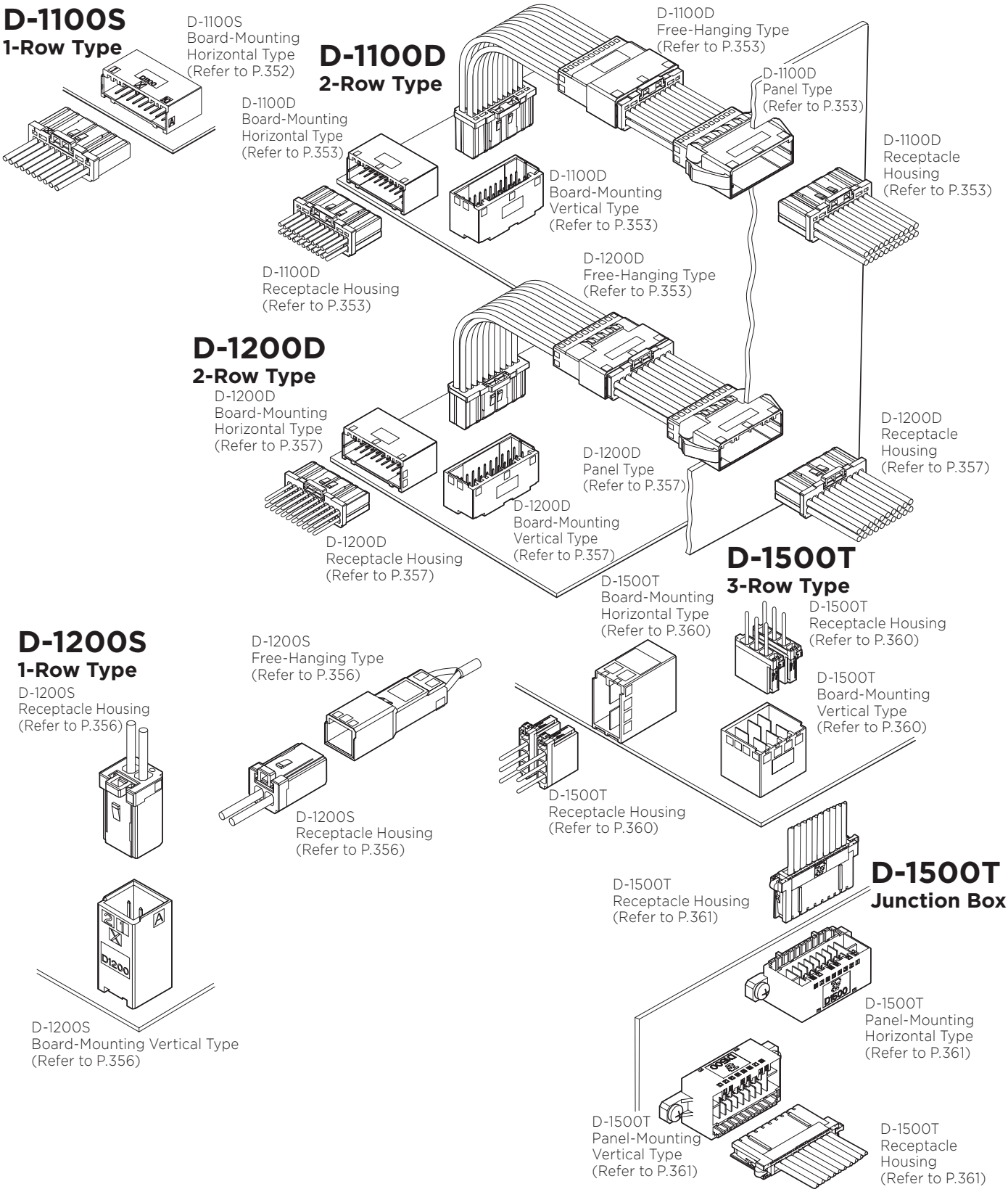
The safety specifications listed below are approved on specific part numbers. Contact our Sales Department to check if the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Product Specification.

Specifications \ Series	D-1100			D-1200, D-1500		
	Voltage Rating	Current Rating	Temperature Rating	Voltage Rating	Current Rating	Temperature Rating
Product Specification 108-78268	125V AC/DC	3A (1Pos.)	−55˚C ~+105˚C	250V AC/DC	5A (1Pos.)	−55˚C ~+105˚C
UL File No.E28476	Determined by needs of machine used	Determined by needs of machine used	—	Determined by needs of machine used	Determined by needs of machine used	—
CSA Report No.LR7189	125V AC/DC	3A	—	250V AC/DC	5A	—
TÜV	125V AC/DC	AWG / A (1Pos.) 22 / 3 24 / 2.5 26 / 2 28 / 1.5 30 / 1	−55˚C ~+105˚C	250V AC/DC	AWG / A (1Pos.) 18 / 5 20 / 4 22 / 3 24 / 2.5 26 / 2 28 / 1.5 30 / 1	−55˚C ~+105˚C

Some part numbers are not available yet. For more information, contact our Sales Department.

Dynamic Series Connectors

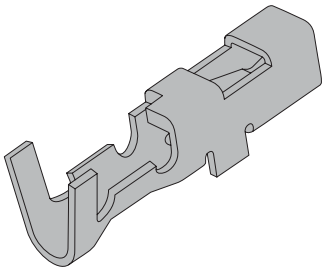
D-1000 Series List of Dynamic Series Products by Application



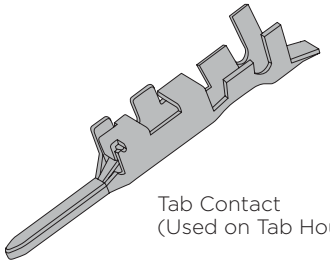
Dynamic Series Connectors

D-1 Contact

■ Crimp Type



Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number					Tool Part Number	
				Receptacle Contact			Tab Contact		Mini-Applicator	Hand Tool ✻1 (Dies Only)
AWG	mm^2				Gold Plated	Tin Plated	Gold Plated	Tin Plated		
30 28	0.05 0.09	0.6~1.2	S	Strip Form	1827569-2	—	1903111-2	—	2114042-2	—
				Loose Piece	1827586-2	—	1903115-2	—	—	2119144-1
28 26 24 22	0.08 0.12 0.20 0.38	1.08~1.6	M	Strip Form	1827570-2	1871303-1	1903112-2	1903120-1	2114045-2	—
				Loose Piece	1827587-2	1871743-1	1903116-2	1903124-1	—	2119141-1
28 26 24 22	0.08 0.12 0.20 0.38	1.08~1.9	L	Strip Form	1827571-2	1871304-1	1903113-2	1903121-1	2114043-2	—
				Loose Piece	1827588-2	1871744-1	1903117-2	1903125-1	—	2119143-1
22 20 18	0.34 0.50 0.86	1.4~2.2	2L	Strip Form	1827572-2	1871731-1	1903114-2	1903122-1	2114047-2	—
				Loose Piece	1827589-2	1871745-1	1903118-2	1903126-1	—	2119142-1

Note:
- Minimum order quantity is provided. When ordering, specify your requirements by multiplying the quantity. (For more information, contact our Sales Department.)
- Gold plated : 0.38 μm Tin plated : 2.0 μm
- Mini-Applicators are for use with automachines. (For more information, contact our Sales Department.)
- Extraction tool : 1891526-1
- Strip Form contacts are for use with Mini-Applicators (automachines) and Loose-Piece contacts are for Hand tools.
- The contacts L and 2L do not fit into the D-1100 receptacle housing.

✻1 With Dies
CC Ⅱ Hand Tool (CERTI-CRIMP Ⅱ) with Flip Locator
Keying Plug : 1939588-1

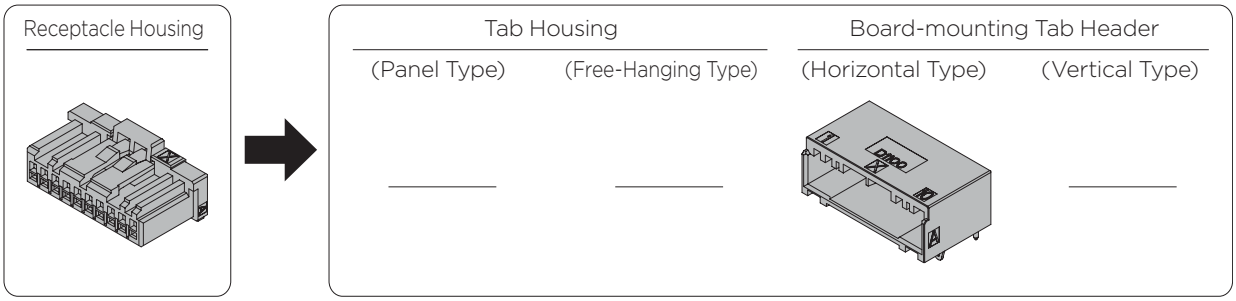
The receptacle contacts can be used with all of the receptacle housings, and tab contacts can be used with all of the tab housings. See from page 437 for details on applicable tools.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1100S — Standard 1 Row Type

Part Number Chart

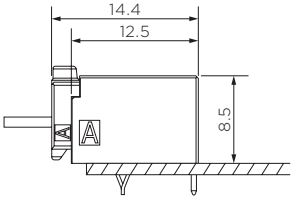


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
4	Black	X	1-1939758-4	Gold	—	—	1-1939760-4	—
				Tin			1-1939761-4	
	Black	Y	2-1939758-4	Gold	—	—	2-1939760-4	—
				Tin			2-1939761-4	
8	Black	X	1-1939758-8	Gold	—	—	1-1939760-8	—
	Black	Y	2-1939758-8	Gold	—	—	2-1939760-8	—
10	Black	X	1-1939758-0	Gold	—	—	1-1939760-0	—
				Tin			1-1939761-0	
	Black	Y	2-1939758-0	Gold	—	—	2-1939760-0	—
				Tin			2-1939761-0	

Information about related products

Applicable Contact ..... Refer to P.351
Performance Specifications ... Refer to P.349

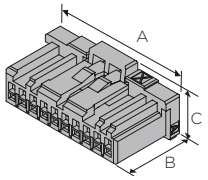
Mating Dimensions



Horizontal Type

Dimensions

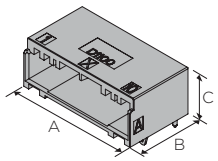
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	—	Black	1-1939758-4	10.6	11.3	9.2
	Y	—	Black	2-1939758-4			
8	X	—	Black	1-1939758-8	18.6	11.3	9.2
	Y	—	Black	2-1939758-8			
10	X	—	Black	1-1939758-0	22.6	11.3	9.2
	Y	—	Black	2-1939758-0			

■ Board-mounting Tab Header

Horizontal Type



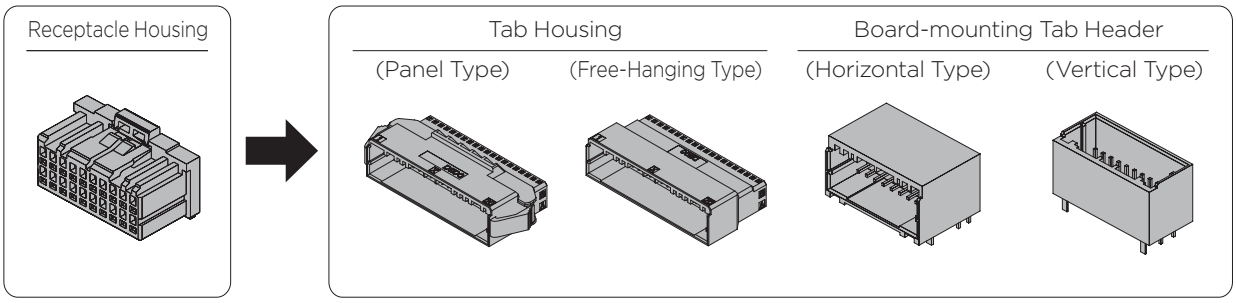
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	Gold	Black	1-1939760-4	10.6	12.5	8.5
		Tin		1-1939761-4			
	Y	Gold	Black	2-1939760-4			
		Tin		2-1939761-4			
8	X	Gold	Black	1-1939760-8	18.6	12.5	8.5
	Y	Gold	Black	2-1939760-8			
10	X	Gold	Black	1-1939760-0	22.6	12.5	8.5
		Tin		1-1939761-0			
	Y	Gold	Black	2-1939760-0			
		Tin		2-1939761-0			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1100D — Standard 2 Row Type

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
10	Black	X	1-1827862-5	Gold	—	—	1-1827873-5	1-2040516-5
20	Black	X	1-1827862-0	Gold	—	—	1-1827873-0	—
22	Black	X	1-1827863-1	Gold	1-1903128-1	1-1903127-1	—	1-1827872-1
	Natural		1-1871057-1	Gold	—	—	—	1-2013710-1
	Yellow	Y	3-1871057-1	Tin	—	—	—	3-1871056-1
26	Black	X	1-1827863-3	Gold	1-1903128-3	1-1903127-3	1-1939638-3	1-1827872-3
	Natural		1-1871057-3	Tin	—	—	—	1-1871056-3
	Black	Y	2-1827863-3				—	Refer to P.361 SMT
28	Black	X	1-1827863-4	Gold	1-1903128-4	1-1903127-4	1-1939638-4	1-1827872-4
	Red		5-1871057-4	Tin	—	—	—	5-1871056-4
30	Black	X	1-1827863-5	Gold	—	—	—	1-1827872-5
				Tin				1-1871315-5
	Natural		1-1871057-5	Tin			—	1-1871056-5
	Yellow		3-1871057-5	Tin			3-2013653-5	3-1871056-5
32	Black	X	1-1827863-6	Gold	1-1903128-6	1-1903127-6	—	1-1827872-6
	Natural		1-1871057-6	Tin	—	—	—	1-1871056-6
	Red		5-1871057-6	Tin				5-1871056-6
34	Black	X	1-1827863-7	Gold	1-1903128-7	1-1903127-7	1-1939638-7	1-1827872-7
	Black	Y	2-1827863-7	Gold	—	—	—	2-1827872-7
40	Black	X	1-1827863-0	Gold	1-1903128-0	1-1903127-0	—	1-1827872-0
				Tin				1-1871315-0
	Black	Y	2-1827863-0	Gold	—	—	—	2-1827872-0
	Natural	X	1-1871057-0	Tin			1-2013653-0	1-1871056-0
	Yellow		3-1871057-0	Tin			—	3-1871056-0
	Red		5-1871057-0	Tin			—	5-1871056-0

Information about related products

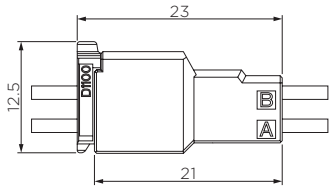
Applicable Contact ..... Refer to P.351
Performance Specifications ... Refer to P.349

Note: All Part Numbers are RoHS compliant.

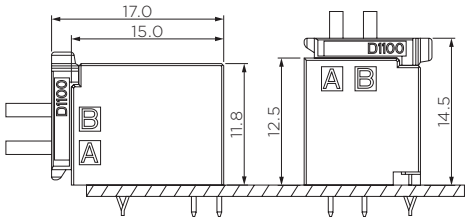
Dynamic Series Connectors

D-1100D — Standard 2 Row Type

Mating Dimensions



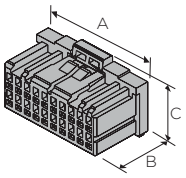
Free-Hanging Type



Horizontal/Vertical Type

Dimensions

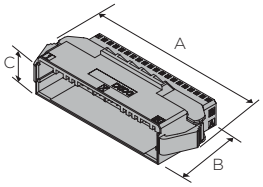
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
10	X	—	Black	1-1827862-5	12.6	11.3	12.5
20	X	—	Black	1-1827862-0	22.6	11.3	12.5
22	X	—	Black	1-1827863-1	24.6	11.3	12.5
		—	Natural	1-1871057-1			
		—	Yellow	3-1871057-1			
26	X	—	Black	1-1827863-3	28.6	11.3	12.5
		—	Natural	1-1871057-3			
	Y	—	Black	2-1827863-3			
28	X	—	Black	1-1827863-4	30.6	11.3	12.5
		—	Red	5-1871057-4			
30	X	—	Black	1-1827863-5	32.6	11.3	12.5
		—	Natural	1-1871057-5			
		—	Yellow	3-1871057-5			
32	X	—	Black	1-1827863-6	34.6	11.3	12.5
		—	Natural	1-1871057-6			
		—	Red	5-1871057-6			
34	X	—	Black	1-1827863-7	36.6	11.3	12.5
	Y	—	Black	2-1827863-7			
40	X	—	Black	1-1827863-0	42.6	11.3	12.5
	Y	—	Black	2-1827863-0			
	X	—	Natural	1-1871057-0			
		—	Yellow	3-1871057-0			
		—	Red	5-1871057-0			

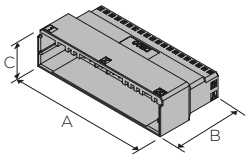
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
22	X	—	Black	1-1903128-1	34.1	21.0	13.9
26	X	—	Black	1-1903128-3	38.1	21.0	13.9
28	X	—	Black	1-1903128-4	40.1	21.0	13.9
32	X	—	Black	1-1903128-6	44.1	21.0	13.9
34	X	—	Black	1-1903128-7	46.1	21.0	13.9
40	X	—	Black	1-1903128-0	52.1	21.0	13.9

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
22	X	—	Black	1-1903127-1	24.6	21.0	11.3
26	X	—	Black	1-1903127-3	28.6	21.0	11.3
28	X	—	Black	1-1903127-4	30.6	21.0	11.3
32	X	—	Black	1-1903127-6	34.6	21.0	11.3
34	X	—	Black	1-1903127-7	36.6	21.0	11.3
40	X	—	Black	1-1903127-0	42.6	21.0	11.3

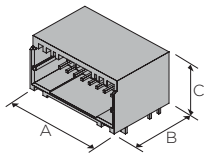
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1100D — Standard 2 Row Type

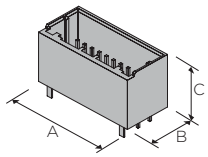
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
10	X	Gold	Black	1-1827873-5	12.6	15.0	11.8
20	X	Gold	Black	1-1827873-0	22.6	15.0	11.8
26	X	Gold	Black	1-1939638-3	28.6	15.0	11.8
28	X	Gold	Black	1-1939638-4	30.6	15.0	11.8
30	X	Tin	Yellow	3-2013653-5	32.6	15.0	11.8
34	X	Gold	Black	1-1939638-7	36.6	15.0	11.8
40	X	Tin	Natural	1-2013653-0	42.6	15.0	11.8

Vertical Type

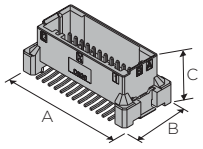


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
10	X	Gold	Black	1-2040516-5	12.6	11.3	12.5
22	X	Gold	Black	1-1827872-1	24.6	11.3	12.5
		Gold	Natural	1-2013710-1			
		Tin	Yellow	3-1871056-1			
26	X	Gold	Black	1-1827872-3	28.6	11.3	12.5
		Tin	Natural	1-1871056-3			
28	X	Gold	Black	1-1827872-4	30.6	11.3	12.5
		Tin	Red	5-1871056-4			
30	X	Gold	Black	1-1827872-5	32.6	11.3	12.5
		Tin	Black	1-1871315-5			
		Tin	Natural	1-1871056-5			
		Tin	Yellow	3-1871056-5			
32	X	Gold	Black	1-1827872-6	34.6	11.3	12.5
		Tin	Natural	1-1871056-6			
		Tin	Red	5-1871056-6			
34	X	Gold	Black	1-1827872-7	36.6	11.3	12.5
	Y	Gold	Black	2-1827872-7			
40	X	Gold	Black	1-1827872-0	42.6	11.3	12.5
		Tin	Black	1-1871315-0			
	Y	Gold	Black	2-1827872-0			
	X	Tin	Natural	1-1871056-0			
		Tin	Yellow	3-1871056-0			
		Tin	Red	5-1871056-0			

SMT Type

■ Board-mounting Tab Header

Vertical Type



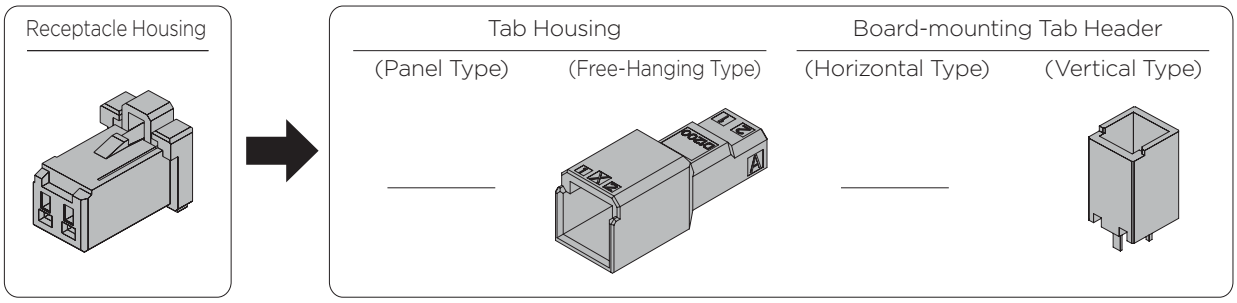
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
26	X	Gold	Black	1-1939995-3	34.6	16.3	13.5
	Y	Gold	Black	2-1939995-3			
40	X	Gold	Black	1-1939995-0	48.6	16.3	13.5
	Y	Gold	Black	2-1939995-0			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1200S — High-Voltage 1 Row Type

Part Number Chart

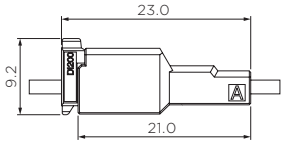


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
2	Black	X	1-1871465-2	Gold	—	1-1903129-2	—	1-1871468-2
	—	Y	—	—	—	—	—	—

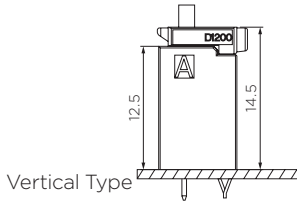
Information about related products

Applicable Contact ..... Refer to P.351
Performance Specifications ... Refer to P.349

Mating Dimensions



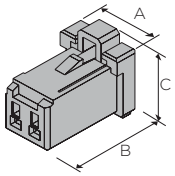
Free-Hanging Type



Vertical Type

Dimensions

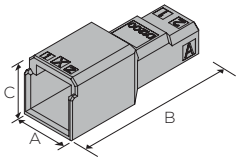
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1871465-2	7.6	11.3	9.2

■ Tab Housing

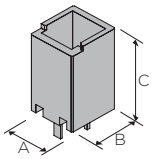
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1903129-2	7.6	21.0	8.0

■ Board-mounting Tab Header

Vertical Type



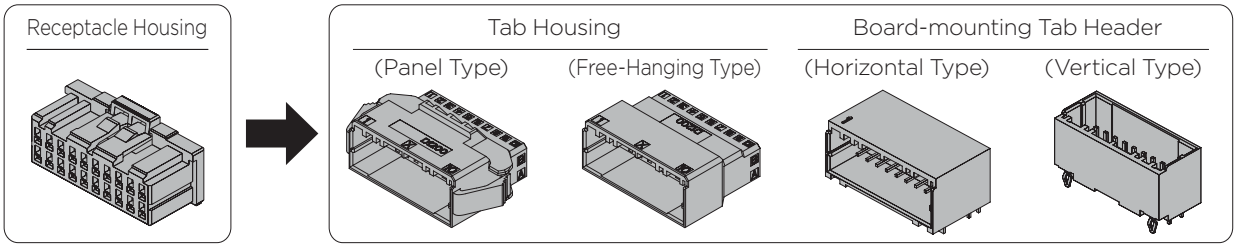
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-1871468-2	7.6	8.0	12.5

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1200D —— High-Voltage 2 Row Type

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
4	Black	X	1-1827864-2	Gold	1-1903131-2	1-1903130-2	1-1827876-2	1-1827875-2
				Tin			1-1871673-2	—
	Natural		1-1939028-2	Gold	—	—	1-1939818-2	1-1939261-2
	Yellow		3-1939028-2	Gold	—	—	3-1939818-2	3-1939261-2
	Black	Y	2-1827864-2	Gold	—	—	2-1827876-2	2-1827875-2
	Natural		2-1939028-2	Gold	—	—	2-1939818-2	2-1939261-2
	Yellow		4-1939028-2	Gold	—	—	4-1939818-2	4-1939261-2
6	Black	X	1-1827864-3	Gold	1-1903131-3	1-1903130-3	1-1827876-3	1-1827875-3
	Black		—	Tin	—	—	—	1-2040558-3
	Natural		1-1939028-3	Gold	—	1-1939796-3	1-1939818-3	1-1939261-3
	Yellow		3-1939028-3	Gold	—	—	3-1939818-3	3-1939261-3
	Black	Y	2-1827864-3	Gold	2-1903131-3	2-1903130-3	2-1827876-3	2-1827875-3
	Natural		2-1939028-3	Gold	—	2-1939796-3	2-1939818-3	2-1939261-3
	Yellow		4-1939028-3	Gold	—	—	4-1939818-3	4-1939261-3
8	Black	X	1-1827864-4	Gold	1-1903131-4	1-1903130-4	1-1827876-4	1-1827875-4
	Natural		1-1939028-4	Gold	—	—	1-1939818-4	1-1939261-4
	Yellow		3-1939028-4	Gold	—	—	3-1939818-4	3-1939261-4
	Black	Y	2-1827864-4	Gold	2-1903131-4	2-1903130-4	2-1827876-4	2-1827875-4
	Natural		2-1939028-4	Gold	—	—	2-1939818-4	2-1939261-4
	Yellow		4-1939028-4	Gold	—	—	4-1939818-4	4-1939261-4
10	Black	X	1-1827864-5	Gold	—	—	—	1-1827875-5
	Natural		1-1939028-5	Gold	—	—	—	1-1939261-5
	Yellow		3-1939028-5	Gold	—	—	—	3-1939261-5
	Black	Y	2-1827864-5	Gold	—	—	—	2-1827875-5
	Natural		2-1939028-5	Gold	—	—	—	2-1939261-5
	Yellow		4-1939028-5	Gold	—	—	—	4-1939261-5
12	Black	X	1-1827864-6	Gold	1-1903131-6	1-1903130-6	1-1827876-6	1-1827875-6
				Tin			1-1871673-6	—
	Natural		1-1939028-6	Gold	—	—	1-1939818-6	1-1939261-6
	Yellow		3-1939028-6	Gold	—	—	3-1939818-6	3-1939261-6
	Black	Y	2-1827864-6	Gold	2-1903131-6	2-1903130-6	2-1827876-6	2-1827875-6
	Natural		2-1939028-6	Gold	—	—	2-1939818-6	2-1939261-6
	Yellow		4-1939028-6	Gold	—	—	4-1939818-6	4-1939261-6
20	Black	X	1-1827864-0	Gold	1-1903131-0	1-1903130-0	1-1827876-0	1-1827875-0
	Natural		1-1939028-0	Gold	—	—	1-1939818-0	1-1939261-0
	Yellow		3-1939028-0	Gold	—	—	3-1939818-0	3-1939261-0
	Black	Y	2-1827864-0	Gold	2-1903131-0	2-1903130-0	2-1827876-0	2-1827875-0
	Natural		2-1939028-0	Gold	—	—	2-1939818-0	2-1939261-0
	Yellow		4-1939028-0	Gold	—	—	4-1939818-0	4-1939261-0

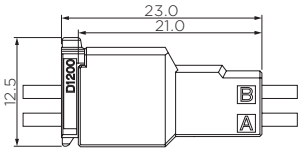
Information about related products
Applicable Contact ..... Refer to P.351
Performance Specifications ... Refer to P.349

Note: All Part Numbers are RoHS compliant.

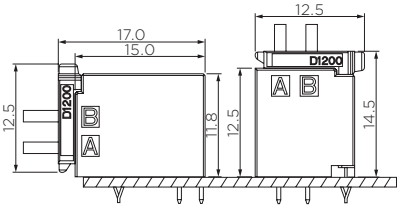
Dynamic Series Connectors

D-1200D — High-Voltage 2 Row Type

Mating Dimensions



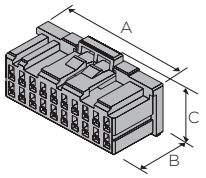
Panel/Free-Hanging Type



Horizontal/Vertical Type

Dimensions

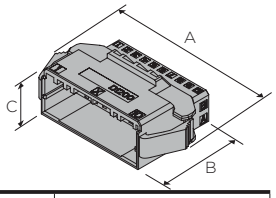
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	—	Black	1-1827864-2	7.6	11.3	12.5
		—	Natural	1-1939028-2			
		—	Yellow	3-1939028-2			
	Y	—	Black	2-1827864-2			
		—	Natural	2-1939028-2			
		—	Yellow	4-1939028-2			
6	X	—	Black	1-1827864-3	10.1	11.3	12.5
		—	Natural	1-1939028-3			
		—	Yellow	3-1939028-3			
	Y	—	Black	2-1827864-3			
		—	Natural	2-1939028-3			
		—	Yellow	4-1939028-3			
8	X	—	Black	1-1827864-4	12.6	11.3	12.5
		—	Natural	1-1939028-4			
		—	Yellow	3-1939028-4			
	Y	—	Black	2-1827864-4			
		—	Natural	2-1939028-4			
		—	Yellow	4-1939028-4			
10	X	—	Black	1-1827864-5	15.1	11.3	12.5
		—	Natural	1-1939028-5			
		—	Yellow	3-1939028-5			
	Y	—	Black	2-1827864-5			
		—	Natural	2-1939028-5			
		—	Yellow	4-1939028-5			
12	X	—	Black	1-1827864-6	17.6	11.3	12.5
		—	Natural	1-1939028-6			
		—	Yellow	3-1939028-6			
	Y	—	Black	2-1827864-6			
		—	Natural	2-1939028-6			
		—	Yellow	4-1939028-6			
20	X	—	Black	1-1827864-0	27.6	11.3	12.5
		—	Natural	1-1939028-0			
		—	Yellow	3-1939028-0			
	Y	—	Black	2-1827864-0			
		—	Natural	2-1939028-0			
		—	Yellow	4-1939028-0			

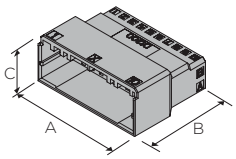
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	—	Black	1-1903131-2	17.1	21.0	13.9
6	X	—	Black	1-1903131-3	19.6	21.0	13.9
	Y	—		2-1903131-3			
8	X	—	Black	1-1903131-4	22.1	21.0	13.9
	Y	—		2-1903131-4			
12	X	—	Black	1-1903131-6	27.1	21.0	13.9
	Y	—		2-1903131-6			
20	X	—	Black	1-1903131-0	37.1	21.0	13.9
	Y	—		2-1903131-0			

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	—	Black	1-1903130-2	7.6	21.0	11.3
6	X	—	Black	1-1903130-3	10.1	21.0	11.3
		—	Natural	1-1939796-3			
	Y	—	Black	2-1903130-3			
		—	Natural	2-1939796-3			
8	X	—	Black	1-1903130-4	12.6	21.0	11.3
	Y	—		2-1903130-4			
12	X	—	Black	1-1903130-6	17.6	21.0	11.3
	Y	—		2-1903130-6			
20	X	—	Black	1-1903130-0	27.6	21.0	11.3
	Y	—		2-1903130-0			

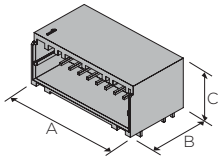
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1200D — High-Voltage 2 Row Type

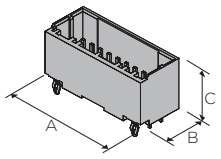
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	Gold	Black	1-1827876-2	7.6	15.0	11.8
		Tin	Black	1-1871673-2			
		Gold	Natural	1-1939818-2			
		Gold	Yellow	3-1939818-2			
	Y	Gold	Black	2-1827876-2			
		Gold	Natural	2-1939818-2			
		Gold	Yellow	4-1939818-2			
6	X	Gold	Black	1-1827876-3	10.1	15.0	11.8
		Gold	Natural	1-1939818-3			
		Gold	Yellow	3-1939818-3			
	Y	Gold	Black	2-1827876-3			
		Gold	Natural	2-1939818-3			
		Gold	Yellow	4-1939818-3			
8	X	Gold	Black	1-1827876-4	12.6	15.0	11.8
		Gold	Natural	1-1939818-4			
		Gold	Yellow	3-1939818-4			
	Y	Gold	Black	2-1827876-4			
		Gold	Natural	2-1939818-4			
		Gold	Yellow	4-1939818-4			
12	X	Gold	Black	1-1827876-6	17.6	15.0	11.8
		Tin	Black	1-1871673-6			
		Gold	Natural	1-1939818-6			
		Gold	Yellow	3-1939818-6			
	Y	Gold	Black	2-1827876-6			
		Gold	Natural	2-1939818-6			
		Gold	Yellow	4-1939818-6			
20	X	Gold	Black	1-1827876-0	27.6	15.0	11.8
		Gold	Natural	1-1939818-0			
		Gold	Yellow	3-1939818-0			
	Y	Gold	Black	2-1827876-0			
		Gold	Natural	2-1939818-0			
		Gold	Yellow	4-1939818-0			

Vertical Type

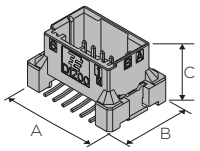


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	Gold	Black	1-1827875-2	7.6	11.3	12.5
		Gold	Natural	1-1939261-2			
		Gold	Yellow	3-1939261-2			
	Y	Gold	Black	2-1827875-2			
		Gold	Natural	2-1939261-2			
		Gold	Yellow	4-1939261-2			
6	X	Gold	Black	1-1827875-3	10.1	11.3	12.5
		Tin	Black	1-2040558-3			
		Gold	Natural	1-1939261-3			
		Gold	Yellow	3-1939261-3			
	Y	Gold	Black	2-1827875-3			
		Gold	Natural	2-1939261-3			
		Gold	Yellow	4-1939261-3			
8	X	Gold	Black	1-1827875-4	12.6	11.3	12.5
		Gold	Natural	1-1939261-4			
		Gold	Yellow	3-1939261-4			
	Y	Gold	Black	2-1827875-4			
		Gold	Natural	2-1939261-4			
		Gold	Yellow	4-1939261-4			
10	X	Gold	Black	1-1827875-5	15.1	11.3	12.5
		Gold	Natural	1-1939261-5			
		Gold	Yellow	3-1939261-5			
	Y	Gold	Black	2-1827875-5			
		Gold	Natural	2-1939261-5			
		Gold	Yellow	4-1939261-5			
12	X	Gold	Black	1-1827875-6	17.6	11.3	12.5
		Gold	Natural	1-1939261-6			
		Gold	Yellow	3-1939261-6			
	Y	Gold	Black	2-1827875-6			
		Gold	Natural	2-1939261-6			
		Gold	Yellow	4-1939261-6			
20	X	Gold	Black	1-1827875-0	27.6	11.3	12.5
		Gold	Natural	1-1939261-0			
		Gold	Yellow	3-1939261-0			
	Y	Gold	Black	2-1827875-0			
		Gold	Natural	2-1939261-0			
		Gold	Yellow	4-1939261-0			

SMT Type

■ Board-mounting Tab Header

Vertical Type



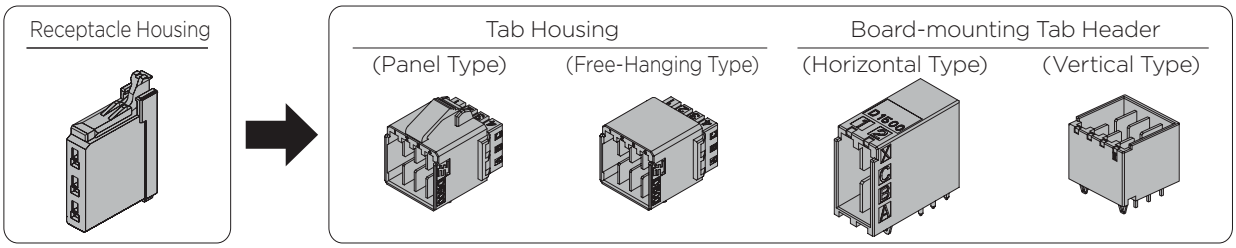
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	X	Gold	Black	1-2013407-6	23.6	16.3	13.5

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1500T — High-Voltage Modular 3 Row Type

Part Number Chart

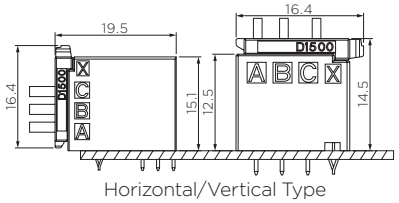


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
3	Black	X	1-1827579-1	—	—	1-2040444-1	—	1-1827581-1
6	Black	X	1-2069029-2	Gold	1-2040404-2	1-2040444-2	1-1827583-2	1-1827581-2
9	Black	X	1-2069029-3	Gold	1-2040404-3	1-2040444-3	—	1-1827581-3
12	Black	X	1-2069029-4	Gold	1-2040404-4	1-2040444-4	—	1-1827581-4
36	Black	X	—	Gold	3-2040404-2	—	—	—

Information about related products

Applicable Contact ..... Refer to P.357
Performance Specifications ... Refer to P.355

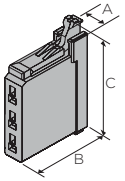
Mating Dimensions



Horizontal/Vertical Type

Dimensions

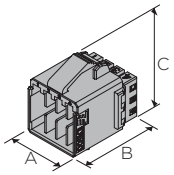
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1827579-1	3.3	11.3	16.4
6	X	—	Black	1-2069029-2	6.8	11.3	16.4
9	X	—	Black	1-2069029-3	10.3	11.3	16.4
12	X	—	Black	1-2069029-4	13.8	11.3	16.4

■ Tab Housing

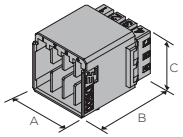
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	1-2040404-2	8.5	21.0	24.5
9	X	—	Black	1-2040404-3	12.0	21.0	24.5
12	X	—	Black	1-2040404-4	15.5	21.0	24.5
36	X	—	Black	3-2040404-2	43.5	21.0	24.5

■ Tab Housing

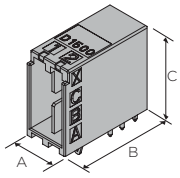
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-2040444-1	3.0	21.0	15.0
6	X	—	Black	1-2040444-2	6.5	21.0	15.0
9	X	—	Black	1-2040444-3	10.0	21.0	15.0
12	X	—	Black	1-2040444-4	13.5	21.0	15.0

■ Board-mounting Tab Header

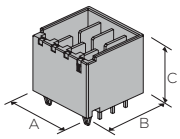
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	1-1827583-2	8.1	17.5	15.1

■ Board-mounting Tab Header

Vertical Type



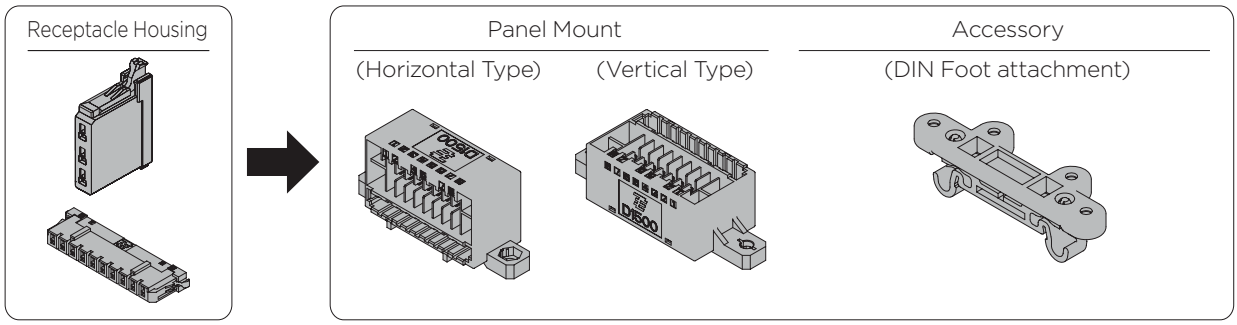
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1-1827581-1	4.6	14.6	12.5
6	X	Gold	Black	1-1827581-2	8.1	14.6	12.5
9	X	Gold	Black	1-1827581-3	11.6	14.6	12.5
12	X	Gold	Black	1-1827581-4	15.1	14.6	12.5

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-1500T —— Junction Box

Part Number Chart



No. of Pos.	Color	Key-ing	Receptacle Housing	Plating	Panel Mount		Accessory
					Horizontal Type	Vertical Type	DIN rail attachment kit
3	Black	X	1-1827579-1	—	—	—	—
10	Black	—	1971150-1	Gold	1971151-1	1971151-2	1971182-1 *

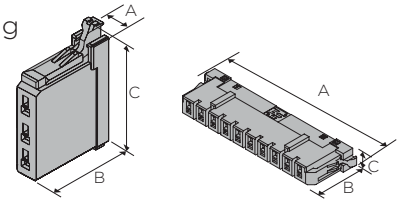
* The following items are in the DIN rail attachment kit.
—Vertical pull-out type panel mount x 1
—DIN rail attachment x 1
—M3 fixing screws x 4

Information about related products

Applicable Contact ..... Refer to P.351
Performance Specifications ... Refer to P.349

Dimensions

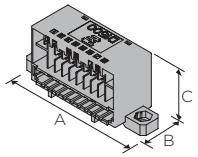
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1827579-1	3.3	11.3	16.4
10	—	—	Black	1971150-1	42.2	11.3	4.6

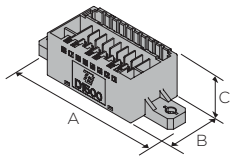
■ Panel Mount

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
34	—	Gold	Black	1971151-1	57.7	18.7	24.6

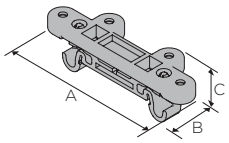
Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
34	—	Gold	Black	1971151-2	64.8	22.8	18.2

■ Accessory

DIN Foot attachment kit



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
—	—	—	Black	1971182-1	67.5	19.0	18.1

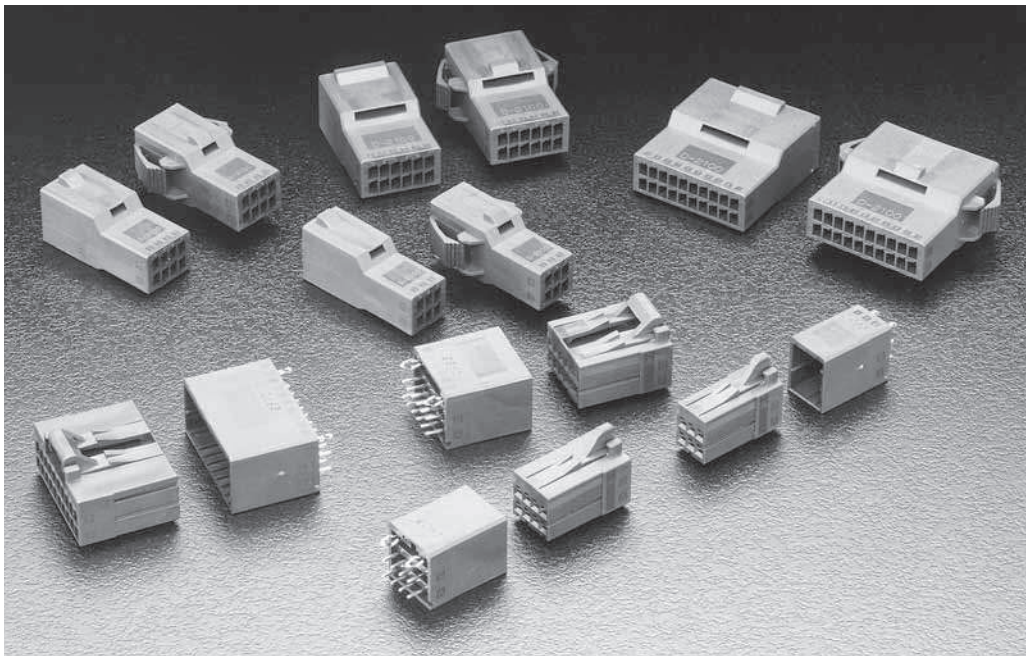
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2000 Series

Series profile

The D-2000 series is a compact connector in the Dynamic series and has the specifications for industrial machinery. Its proprietary concept long wiping length provides the high-reliability contacts needed for industrial machinery. The lineup also includes the multi-position drawer type not in any other series, and the hybrid type that integrates signal and power lines in a single connector.



Features

1. Terminal and housing construction are twist resistant
The box shape receptacle contact is highly resistant to twisting and the housing slit also prevents angled mating to increase reliability.

2. Contact wiping length
Attaining the reliability needed for industrial machinery in a compact size by using a long contact wiping length.

3. Wire sizes:
With its 2.5 mm pitch, it is a compact series, yet it can use AWG 18 wires, which are often used in industrial equipment.

4. Lock feeling
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (half-mating), even if the connection cannot be seen.

5. Keying
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.

6. Center locking
This is the first application of a center lock in the Dynamic series. On-board space requirements can be minimized because these connectors can be mounted in a tight pitch for high-density mounting on boards requiring signal lines.

7. Drawer type
The drawer type connector was developed with a floating construction on one side for applications where it is not possible to see the connection. There can be up to 50 positions, the highest in the series. These connectors make it possible to make connections between units without looking.

8. Hybrid type
For signal lines use the D-2000 connector, for power lines use the D-3000 connector. The D-2600 series combines signal and power lines in a single connector. This cuts on-board space requirements and improves maintenance.

Dynamic Series Connectors

D-2000 Series Specifications and Standards

Performance Specifications

Item	2100S/D	2100M	2600D
Pitch	2.5mm		
Current Rating	5A Max.	2.6A Max.	3.2A Max.
Voltage Rating	250V AC/DC		
Dielectric Withstanding Voltage	1500V AC	2300V AC	1500V AC
Contact Resistance	5mΩ Max. (initial) 10mΩ Max. (Final)		
Insertion Force	4.9N Max. (per position)		
Extraction Force	0.29N Min. (per position)		
Durability	500 Cycles		
Housing Look Strength	39.2N Min	—	98N Min

Positions/wire size/current rating

Values for D-2100S/D

No. of Pos.	Wire Size					
	#18	#20	#22	#24	#26	#28
3	5	4.5	4.3	3.3	2.9	2.3
6	5	4.2	4	2.7	2.5	2
8	4.5	4	3.5	2.5	2.2	1.8
12	4	3.5	3	2.3	1.9	1.5
16	3.2	2.8	2.4	2	1.6	1.2
20	3.2	2.8	2.4	2	1.6	1.2

Specifications and Instruction Sheet

Series	D-2100S/D	D-2100M	D-2600D
Product Specification	108-5619	108-5659	108-78301
Application Specification	114-5258		
Instruction Sheet (Hand Tool)	411-5897		
Instruction Sheet (Extraction Tool)	(1276716-1) 411-5900		

Refer to the specifications on page 372 for the D-3000 connector used with the D-2600D.
Don't fail to obtain Instruction Sheets when you choose to use these tools.
Orders can be placed through our online catalogs also.

Material and Finish

Description	Material	Finish
Receptacle contact Tab contact	Copper alloy	Contact area 0.38μm min Gold plated underplated Nickel
Tab post	Copper alloy	Contact area 0.38μm min Gold plated Contact tail Tin plated underplated Nickel
Housing	UL94V-0, Glass filled thermoplastic polyester (PBT)	

Safety Specifications

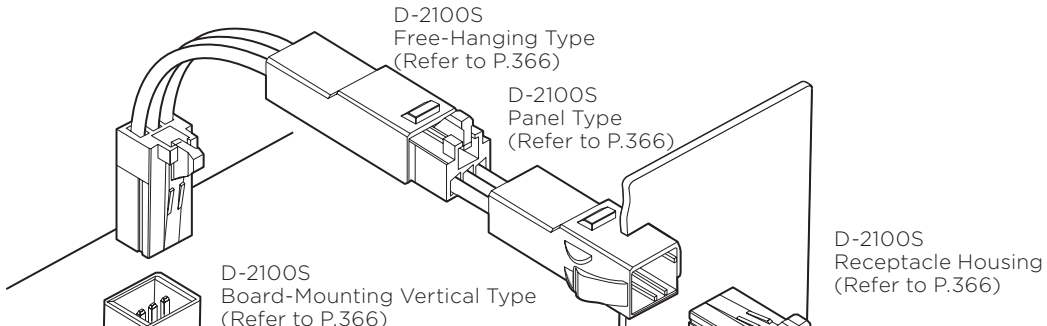
The safety specifications listed below are approved on specific part numbers. Contact our Sales Department to check if the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Product Specification.

Series / Specifications	D-2100 Series			D-2100M Drawer Type		
	Voltage Rating	Current Rating	Temperature Rating	Voltage Rating	Current Rating	Temperature Rating
Product Specification 108-5619 (Standard) 108-5659 (Drawer Type)	250V AC/DC	5A (1 position)	−55˚C~+105˚C	250V AC/DC	2.6A [with AWG#20 50 position]	−55˚C~+105˚C
UL File No.E28476	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—	Pending		
CSA Report No. LR 7189	250V AC/DC	AWG#24p#28: 3.3A AWG#18p#22: 5A	—			
TÜV License No. R 9950679	125V AC/DC	5A	−55˚C~+105˚C			

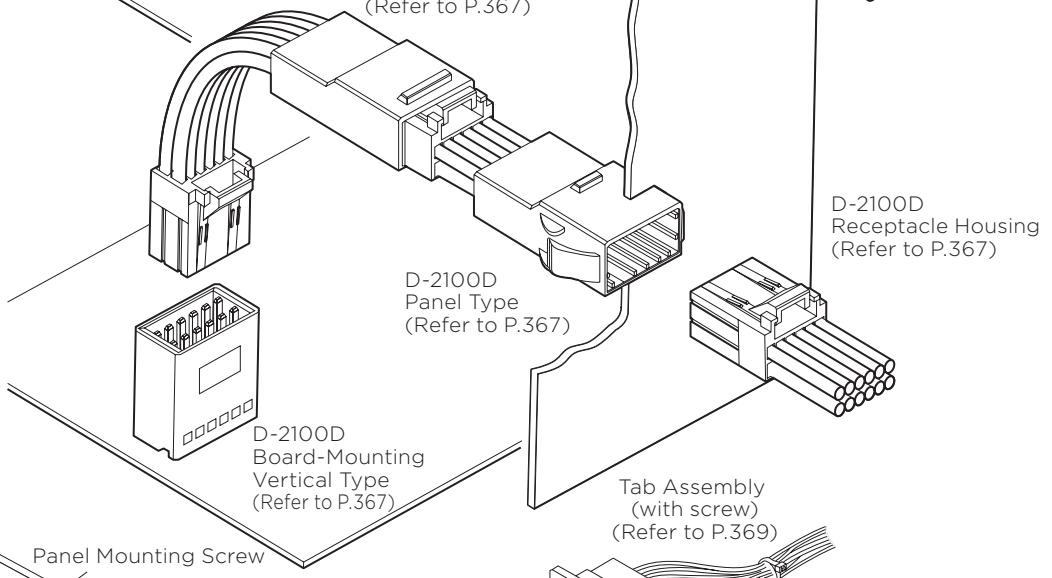
Dynamic Series Connectors

D-2000 Series List of Dynamic Series Products by Application

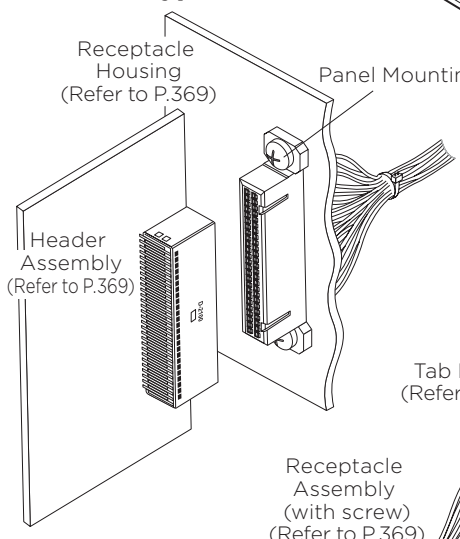
D-2100S
1 Row Type

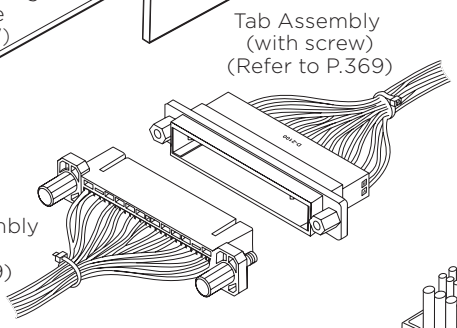


D-2100D
2 Row Type

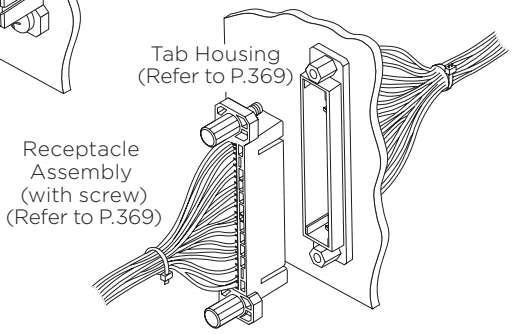


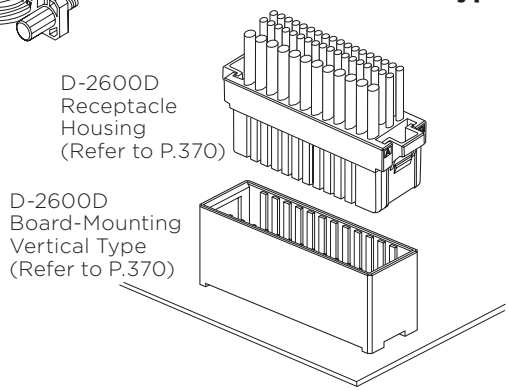
D-2100M
Drawer Type





D-2600D
Dual Row
Combined Type

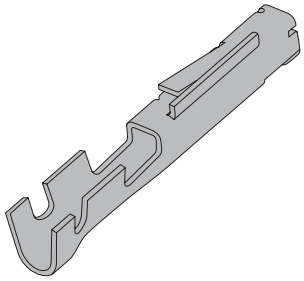




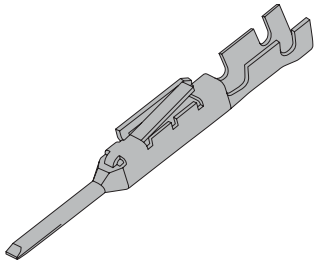
Dynamic Series Connectors

D-2 Contact

■ Crimp Type
(Gold Plated: 0.38μm)



Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number			Tool Part Number	
AWG	mm^2			Receptacle Contact		Tab Contact	Mini-Applicator	Hand Tool
28 26 24	0.08 0.12 0.20	0.88~1.5	S	Strip Form	1318106-1	1318110-1	1426681-2	—
				Loose Piece	1318108-1	1318112-1	—	91576-1
22 20 18	0.30 0.50 0.85	1.3~1.9	M	Strip Form	1318105-1	1318109-1	1426555-2	—
				Loose Piece	1318107-1	1318111-1	—	91595-1

Note :
- Minimum order quantity is provided. When ordering, specify your requirements by multiplying the quantity. (The figures for Strip Form Contacts denote one-reel's quantities.)
- Mini-Applicators are for use with automachines. (Refer to P.437)
- Strip Form contacts are for use with Mini-Applicators (automachines) and Loose-Piece contacts are for Hand tools.

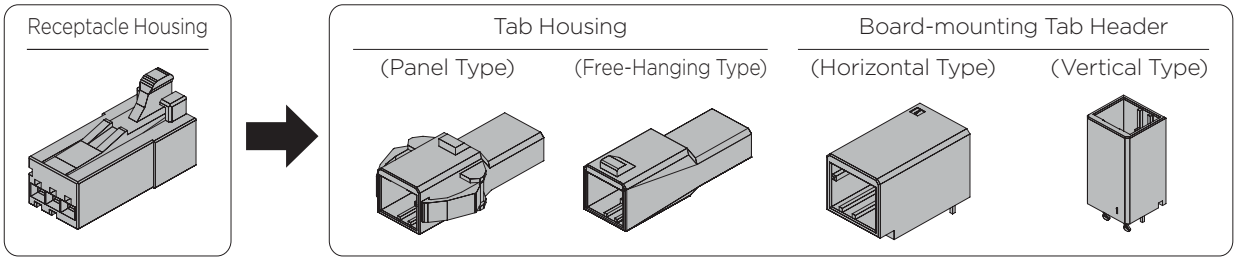
The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings. See from page 437 for details on applicable tools.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2100S — Standard 1 Row Type

Part Number Chart



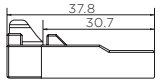
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
3	Black	X	1-1318120-3	Gold	1-1318116-3	1-1318117-3	1376135-1	1318123-1
	Black	Y	2-1318120-3	Gold	2-1318116-3	2-1318117-3	1376135-2	1318123-2
	Black	Z	3-1318120-3	Gold	—	—	1376135-3	—
	Black	X	1-1473074-3*	Gold	—	—	—	1-1318123-1

* Drawer Type

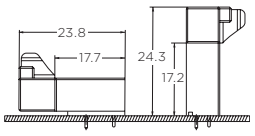
Information about related products

Applicable Contact ..... Refer to P.365
Performance Specifications ... Refer to P.363

Mating Dimensions



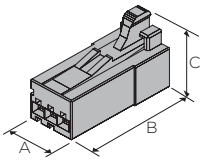
Panel/Free-Hanging Type



Horizontal Type Vertical Type

Dimensions

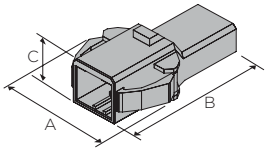
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1318120-3	8.9	20.0	12.0
	Y	—	Black	2-1318120-3			
	Z	—	Black	3-1318120-3			
	X	—	Black	1-1473074-3	8.9	20.0	11.8

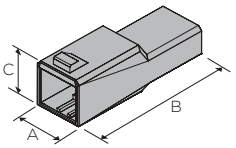
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1318116-3	19.7	30.7	9.5
	Y	—	Black	2-1318116-3			

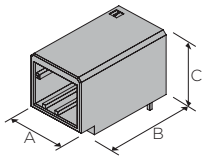
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1318117-3	10.2	30.7	9.5
	Y	—	Black	2-1318117-3			

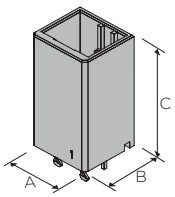
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1376135-1	10.2	17.7	11.0
	Y	Gold	Black	1376135-2			
	Z	Gold	Black	1376135-3			

Vertical Type



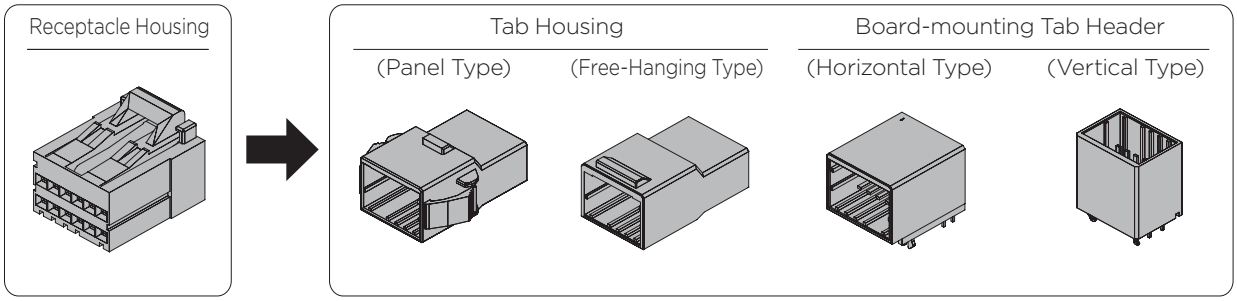
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1318123-1	10.2	9.5	17.8
		Gold	Black	1-1318123-1			
	Y	Gold	Black	1318123-2			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2100D — Standard 2 Row Type

Part Number Chart



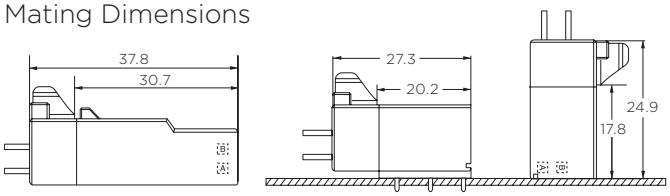
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
6	Black	X	1-1318119-3	Gold	1-1318114-3	1-1318115-3	1376136-1	1318124-1
	Black	Y	2-1318119-3	Gold	2-1318114-3	2-1318115-3	1376136-2	1318124-2
8	Black	X	1-1318119-4	Gold	1-1318114-4	1-1318115-4	1376009-1	1318125-1
							1-1376009-1*	1-1318125-1*
	Black	Y	2-1318119-4	Gold	2-1318114-4	2-1318115-4	1376009-2	1318125-2
								1-1318125-2*
12	Black	X	1-1318118-6	Gold	1-1318114-6	1-1318115-6	1376020-1	1318126-1
								1-1318126-1*
	Black	Y	2-1318118-6	Gold	2-1318114-6	2-1318115-6	1376020-2	1318126-2
								1-1318126-2*
	Black	Z	3-1318118-6	Gold	—	—	—	1318126-3
16	Black	X	1-1318118-8	Gold	—	—	—	1747994-1
	Black	Y	2-1318118-8	Gold	—	—	—	1747994-2
20	Black	X	1-1318118-9	Gold	1-1318114-9	1-1318115-9	1376137-1	1318127-1
	Black	Y	2-1318118-9	Gold	2-1318114-9	2-1318115-9	1376137-2	1318127-2

* Sequential Type

Information about related products

Applicable Contact ..... Refer to P.365
Performance Specifications ... Refer to P.363

Mating Dimensions



Panel/Free-Hanging Type Horizontal Type Vertical Type

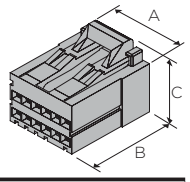
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2100D — Standard 2 Row Type

Dimensions

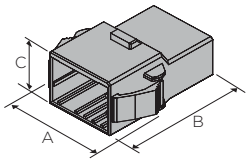
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	1-1318119-3	8.3	20.0	15.8
	Y	—	Black	2-1318119-3			
8	X	—	Black	1-1318119-4	10.8	20.0	15.8
	Y	—	Black	2-1318119-4			
12	X	—	Black	1-1318118-6	15.8	20.0	14.8
	Y	—	Black	2-1318118-6			
	Z	—	Black	3-1318118-6			
16	X	—	Black	1-1318118-8	20.8	20.0	14.8
	Y	—	Black	2-1318118-8			
20	X	—	Black	1-1318118-9	25.8	20.0	14.8
	Y	—	Black	2-1318118-9			

■ Tab Housing

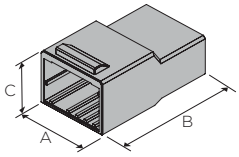
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	1-1318114-3	19.7	30.7	13.2
	Y	—	Black	2-1318114-3			
8	X	—	Black	1-1318114-4	22.2	30.7	13.2
	Y	—	Black	2-1318114-4			
12	X	—	Black	1-1318114-6	27.2	30.7	13.2
	Y	—	Black	2-1318114-6			
20	X	—	Black	1-1318114-9	37.2	30.7	13.2
	Y	—	Black	2-1318114-9			

■ Tab Housing

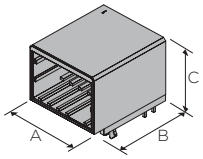
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	1-1318115-3	10.2	30.7	10.7
	Y	Gold	Black	2-1318115-3			
8	X	Gold	Black	1-1318115-4	12.7	30.7	10.7
	Y	Gold	Black	2-1318115-4			
12	X	Gold	Black	1-1318115-6	17.7	30.7	10.7
	Y	Gold	Black	2-1318115-6			
20	X	Gold	Black	1-1318115-9	27.7	30.7	10.7
	Y	Gold	Black	2-1318115-9			

■ Board-mounting Tab Header

Horizontal Type

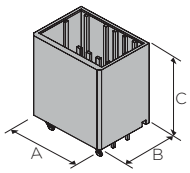


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	1376136-1	10.2	20.2	14.7
	Y	Gold	Black	1376136-2			
8	X	Gold	Black	1376009-1 1-1376009-1*	12.7	20.2	14.7
	Y	Gold	Black	1376009-2			
12	X	Gold	Black	1376020-1	17.7	20.2	14.7
	Y	Gold	Black	1376020-2			
20	X	Gold	Black	1376137-1	27.7	20.2	14.7
	Y	Gold	Black	1376137-2			

* Sequential Type

■ Board-mounting Tab Header

Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	1318124-1	10.2	13.2	17.8
	Y	Gold	Black	1318124-2			
8	X	Gold	Black	1318125-1 1-1318125-1*	12.7	13.2	17.8
	Y	Gold	Black	1318125-2 1-1318125-2*			
12	X	Gold	Black	1318126-1 1-1318126-1*	17.7	13.2	17.8
	Y	Gold	Black	1318126-2 1-1318126-2*			
	Z	Gold	Black	1318126-3			
16	X	Gold	Black	1747994-1	22.7	13.2	17.8
	Y	Gold	Black	1747994-2			
20	X	Gold	Black	1318127-1	27.7	13.2	17.8
	Y	Gold	Black	1318127-2			

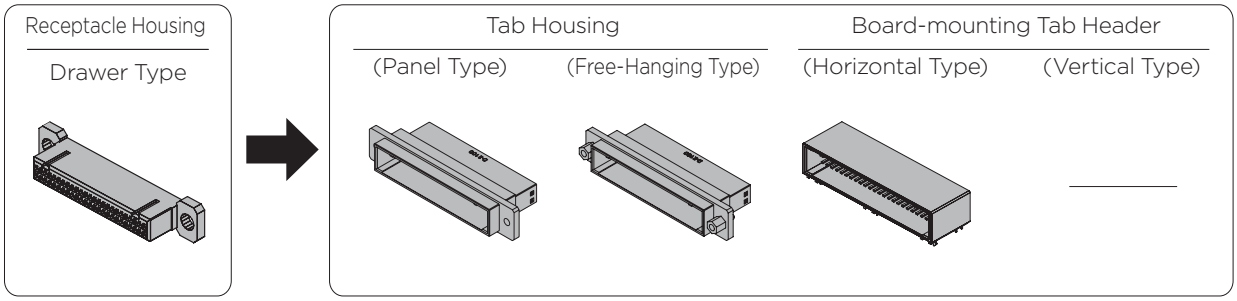
* Sequential Type

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2100M —— Dual Row Standard Multi Position Type (Drawer)

Part Number Chart

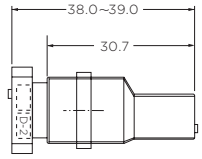


No. of Pos.	Color	Keying	Receptacle Housing		Plating	Tab Housing		Board-mounting Tab Header	
			Type	Part Number		Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
50	Black	—	Drawe	1318577-1	Gold	1318578-1 1318578-2 (With nut)	—	1318579-1	—
	Black	—	Drawer (With screw)	1376072-2	—	—	1376073-2	—	—

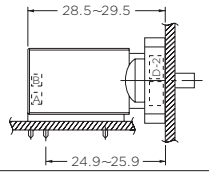
Information about related products

Applicable Contact ..... Refer to P.365
Performance Specifications ... Refer to P.363
Accessory ..... Refer to P.442

Mating Dimensions



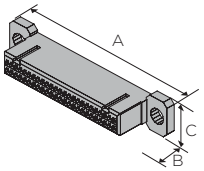
Panel/Free-Hanging Type



Dimensions

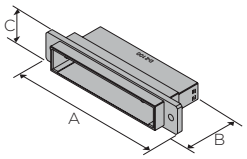
■ Receptacle Housing

■ Receptacle Assembly
(with Movable Head screw)



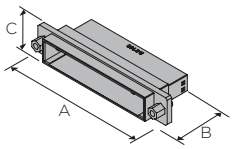
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
50	—	—	Black	1318577-1	88.5	20.0	16.6
50	—	—	Black	1376072-2	88.5	32.0	16.6

■ Tab Housing Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
50	—	—	Black	1318578-1	86.1	30.7	15.9
	—	—	Black	1318578-2 (With nut)			

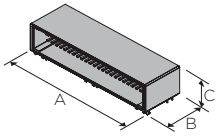
■ Tab Assembly (with Fixed Head screw)
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
50	—	—	Black	1376073-2	86.1	30.7	15.9

■ Board-mounting Tab Header

Horizontal Type



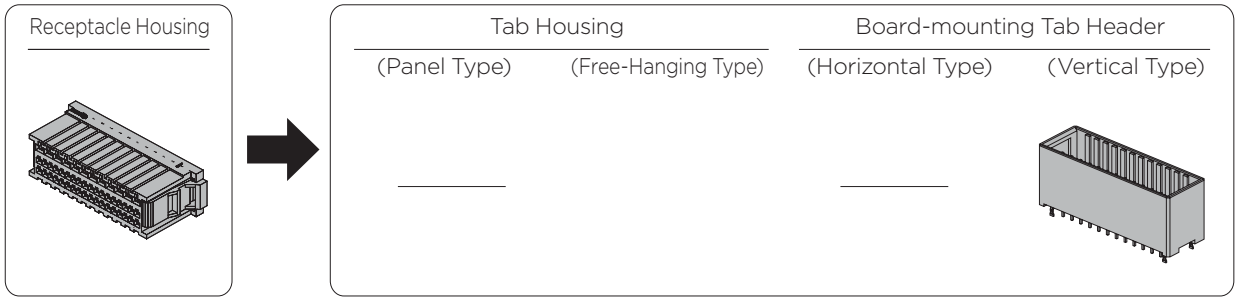
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
50	—	Gold	Black	1318579-1	68.5	21.1	15.4

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-2600D —— Dual Row Combined Type

Part Number Chart

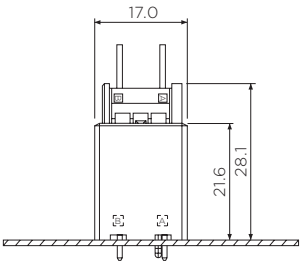


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
48	Black	—	1827540-1	Gold	—	—	—	1827538-1

Information about related products

Applicable Contact ..... Refer to P.365
Performance Specifications ... Refer to P.363

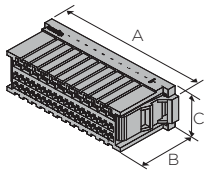
Mating Dimensions



Vertical Type

Dimensions

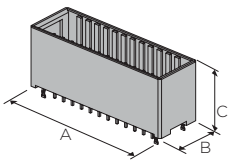
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
48	—	—	Black	1827540-1	58.7	22.8	15.8

■ Board-mounting Tab Header

Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
48	—	Gold	Black	1827538-1	55.9	18.0	21.6

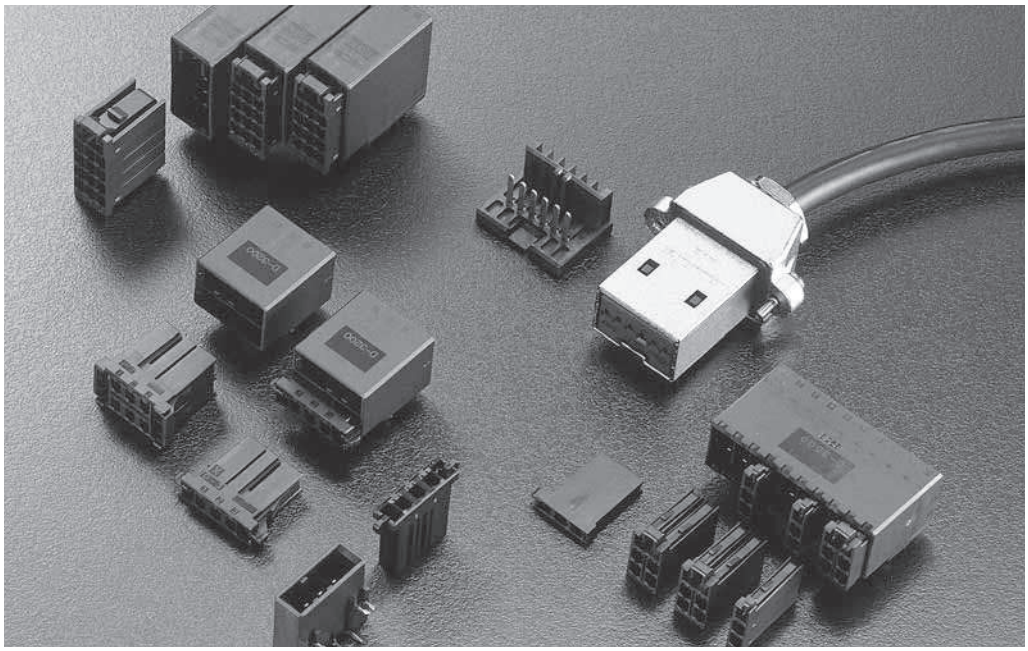
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3000 Series

Series profile

This is the main series in the Dynamic series, it is used extensively as a combined signal and power connector in industrial machinery. There are two pin arrangements, the standard 3.81-mm pitch and the high voltage 5.08-mm pitch. The former is mainly for signal circuits and power circuits, the latter is for high-voltage power supply circuits. They are small but designed for large currents of 15 amperes per contact by using a newly developed copper alloy to handle the demand for compact high-power power supplies produced by the recent minituarization of devices. The concept driving the development is, "We want the Dynamic series to handle all our customers' multi-usage applications. To do this, expand the variations of housing and mounting types". According to that concept, the D-3000 series terminals can be used for all housings in the same series, the extensive variations in these housings the Dynamic series can cover an array of demands eliminating the need to consider different connectors or makers for each application. The D-3000 series, which has already been on the market for over ten years since it was first developed, has evolved in response to customer demands. We are continuing its process of evolution even now.



Features

1. Terminal construction is twist resistant
The D-3000 series uses a twist-resistant box type receptacle and tab construction concept (3 point contact) developed for the automotive market. It has a tab contact that produces consistent reliability under actual working conditions.

2. Three types of plating
Plating can be selected from three different types according to the application to optimize cost performance. Tin plating can be used under normal conditions for low mating cycles. For high mating cycle applications, 0.38 μm gold plating can be used, and for bad environments 0.76 μm gold plating is available.

3. Two contact pressures
There are two variations of contact pressure to provide the best contact environment for each application. It is possible to differentiate with standard contact pressure connectors for applications that need extraction resistance or multiple positions, or high contact pressure connectors for applications where vibration is present.

4. High current
Regardless of their size, these connectors can handle up to 15 amperes of current (temperature increase under 30 degrees). This is achieved with a newly developed copper alloy and a reliable three point contact construction.

5. Lock feeling
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (half-mating), even if the connection cannot be seen.

6. Keying
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating. It is also possible to make more key patterns by using keying plugs.

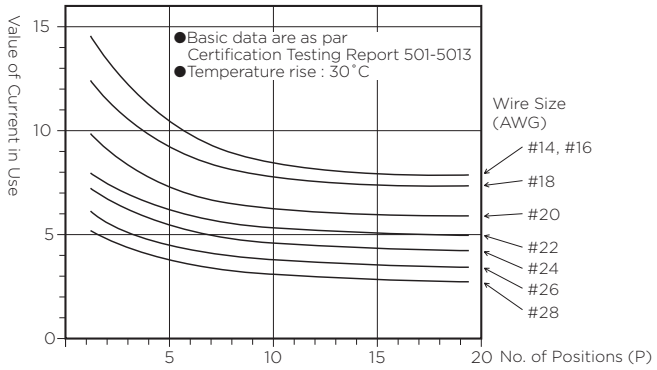
Dynamic Series Connectors

D-3000 Series Specifications and Standards

Performance Specifications

Item \ Pitch	150mil (3.81mm)	200mil (5.08mm)
Voltage Rating	250V AC/DC	600V AC/DC
Current Rating	1 position: 15A 3 position: 12A 6 position: 9.5A 16 position: 8A (when using #16 AWG wire)	
Contact Resistance	10mΩ Max. (Final)	
Dielectric Withstanding Voltage	1,500V AC (1minute)	2,200V AC (1minute)
Operating Temperature	−55˚C~+105˚C	

Positions/wire size/current rating



Specifications and Instruction Sheets

Product Specification	108-5349
Testing Report	501-5013
Application Specification	114-5148
Extraction Tool (Part Number : 234168-1) Instruction Sheet	411-5726

Instruction Sheet Hand Tools	
Tool No.	IS No.
91565-1 91559-1 91558-1 91560-1 91561-1	408-8547
1762954-1	411-78206
1762956-1	411-78207

Don't fail to obtain Instruction Sheets when you choose to use these tools. Orders can be placed through our online catalogs also.

Material and Finish

Description	Material	Finish
Receptacle contact Tab contact	Copper alloy	Bright Tin plated and Gold plated with underplated Nickel (1.27μm)
Tab post	Copper alloy	Tin plated and Gold plated with underplated Nickel (1.27μm)
Housing	UL94V-O, Glass filled thermoplastic polyester (PBT) and PPS (SMT Type), Black color.	

Safety Specifications

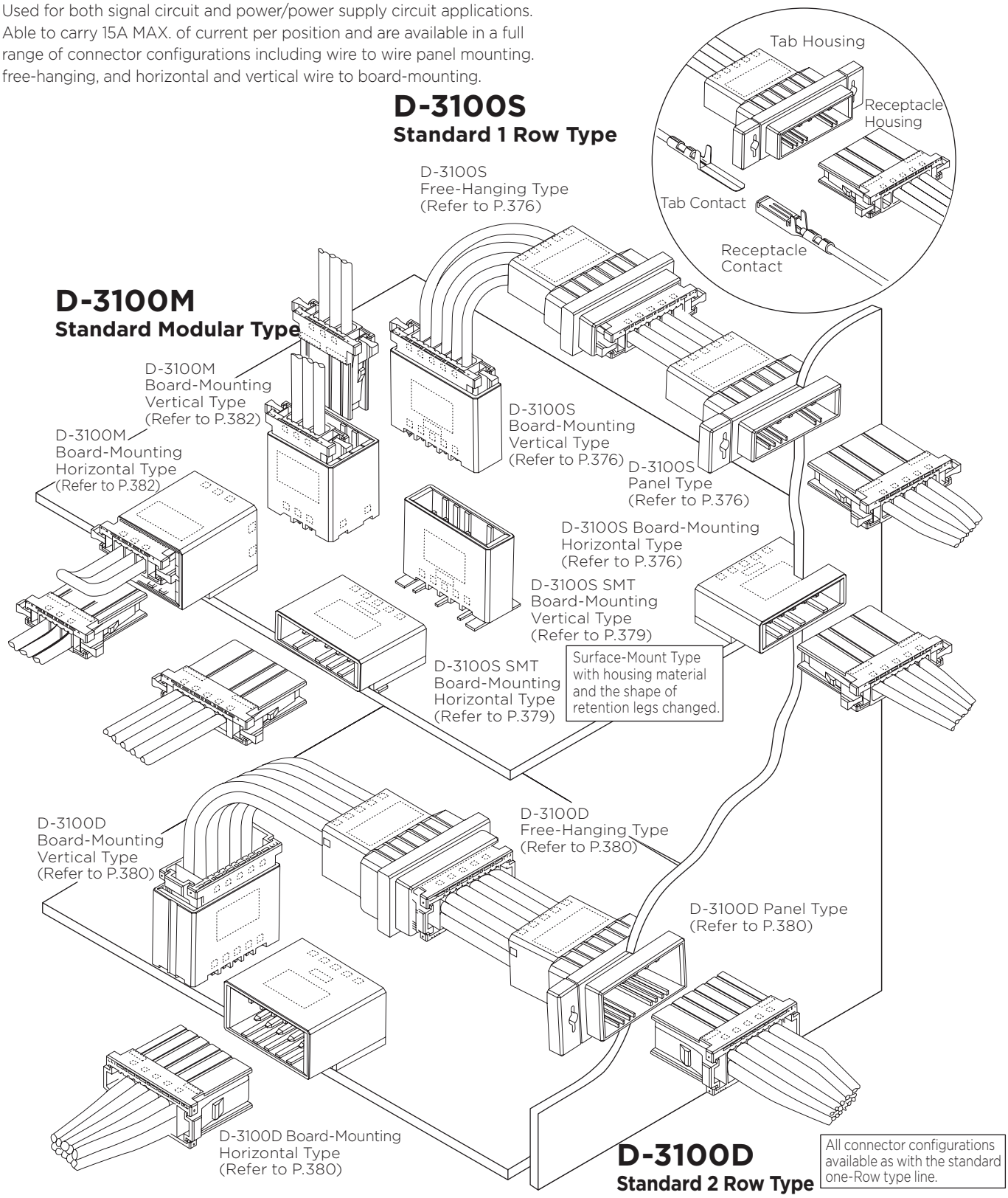
The safety specifications listed below are approved on specific part numbers. Contact our Sales Department to check if the part numbers you use are approved or not. Keep in mind that there are instances where values differ from those given by Product Specification.

Specifications \ Series	D-3100, D-3400 Series (3.81mm pitch)			D-3200, D-3500 Series (5.08mm pitch)		
	Voltage Rating	Current Rating	Temperature Rating	Voltage Rating	Current Rating	Temperature Rating
Product Specification 108-5349	250V AC/DC	See the preceding page	−55˚C~+105˚C	600V AC/DC	See the preceding page	−55˚C~+105˚C
UL File No.E28476 (Recognized Component)	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—
CSA Report No. LR7189	250V AC/DC	8A MAX	—	250V AC/DC	8A MAX	—
TÜV License No. R9151488 (EN61984) IP Protection IP-00 Overvoltage Classification(Ⅱ) Number of Repeated Insertions and Withdrawals 50	250V AC 300V DC	AWG / A 28 / 2 26 / 3 24 / 3 22 / 4 20 / 5 18 / 6 16 / 8 14 / 8	−20˚C~+105˚C	400V AC 300V DC	AWG / A 28 / 2 26 / 3 24 / 3 22 / 4 20 / 5 18 / 6 16 / 8 14 / 8	−20˚C~+105˚C
Same as above Overvoltage Classification(Ⅲ)	—	Same as above	Same as above	250V AC 300V DC	Same as above	—

Dynamic Series Connectors

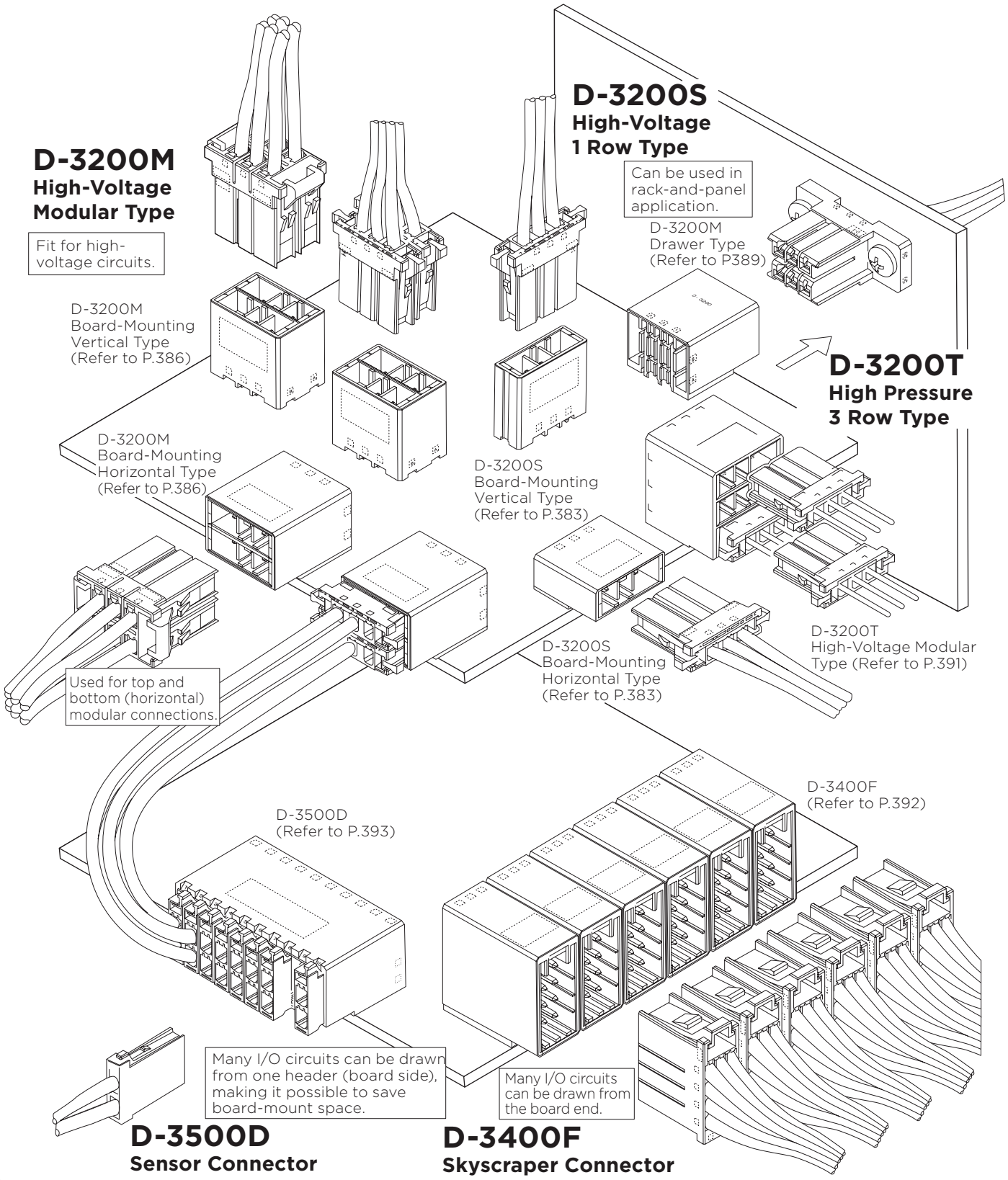
D-3000 Series List of Dynamic Series Products by Application

Used for both signal circuit and power/power supply circuit applications. Able to carry 15A MAX. of current per position and are available in a full range of connector configurations including wire to wire panel mounting. free-hanging, and horizontal and vertical wire to board-mounting.


D-3100S
Standard 1 Row Type
Tab Housing
Receptacle Housing
Tab Contact
Receptacle Contact
D-3100S Free-Hanging Type (Refer to P.376)
D-3100M
Standard Modular Type
D-3100M Board-Mounting Vertical Type (Refer to P.382)
D-3100M Board-Mounting Horizontal Type (Refer to P.382)
D-3100S Board-Mounting Vertical Type (Refer to P.376)
D-3100S Panel Type (Refer to P.376)
D-3100S Board-Mounting Horizontal Type (Refer to P.376)
D-3100S SMT Board-Mounting Vertical Type (Refer to P.379)
D-3100S SMT Board-Mounting Horizontal Type (Refer to P.379)
Surface-Mount Type with housing material and the shape of retention legs changed.
D-3100D Board-Mounting Vertical Type (Refer to P.380)
D-3100D Free-Hanging Type (Refer to P.380)
D-3100D Panel Type (Refer to P.380)
D-3100D Board-Mounting Horizontal Type (Refer to P.380)
D-3100D
Standard 2 Row Type
All connector configurations available as with the standard one-Row type line.

Dynamic Series Connectors

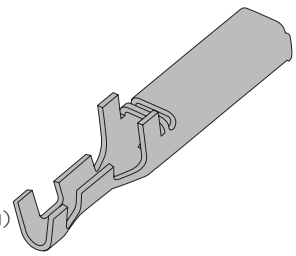
D-3000 Series List of Dynamic Series Products by Application



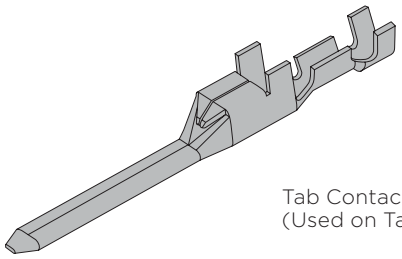
Dynamic Series Connectors

D-3000 Series D-3 Contact and Application Tooling

■ Crimp Type



Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)

Applicable Wire		Wire Ins. Diameter mm *1	Wire Range Mark	Contact Part Number				Tool Part Number	
				Receptacle Contact			Tab Contact	Mini-Applicator	Hand Tool (Dies Only)
AWG	mm^2				Standard contact (Gold Plated Only)	High contact			
28	0.08	0.8~1.2	S	Strip Form	175194-2	1-175194-2	175284-2	2088631-2	
						1-175194-3	175284-3		
26	0.12				175194-3	1-175194-5	175284-5		
				Loose Piece	175216-2	1-175216-2	175287-2		91565-1
						1-175216-3	175287-3		
24	0.20	1.0~1.4			175216-3	1-175216-5	175287-5		
24	0.20	1.2~1.6	M	Strip Form	175195-2	1-175195-2	175285-2	1426371-2	
						1-175195-3	175285-3		
					175195-3	1-175195-5	175285-5		
22	0.30	1.7~2.6		Loose Piece	175217-2	1-175217-2	175288-2		91559-1
						1-175217-3	175288-3		1762954-1★
20	0.50				175217-3	1-175217-5	175288-5		(1762955-1)
20	0.50	1.8~2.8	L	Strip Form	175196-2	1-175196-2	175286-2	1426405-2	
						1-175196-3	175286-3		
18	0.85				175196-3	1-175196-5	175286-5		
				Loose Piece	175218-2	1-175218-2	175289-2		91558-1
						1-175218-3	175289-3		1762956-1★
16	1.25	2.2~2.8			175218-3	1-175218-5	175289-5		(1762957-1)
16	1.25	2.2~2.8	2L	Strip Form	917484-2	1-917484-2	917485-2	1426353-2	
						1-917484-3	917485-3		
14	2.20				917484-3	1-917484-5	917485-5		
				Loose Piece	917511-2	1-917511-2	917512-2		91560-1
						1-917511-3	917512-3		
					917511-3	1-917511-5	917512-5		
16	1.25	3.1~3.3	3L	Strip Form	353715-2	1-353715-2	353716-2	1426542-2	
						1-353715-3	353716-3		
					353715-3	1-353715-5	353716-5		
14	2.20	3.5~3.8		Loose Piece	353717-2	1-353717-2	353718-2		91561-1
						1-353717-3	353718-3		
					353717-3	1-353717-5	353718-5		

Note :
- The part number suffix is the code for plating.
  -2: 0.38 μm thick gold plated
  -3: 0.76 μm thick gold plated
  -5: tin plated (only set for high contact force types)
- Solder-type Contact : We do not manufacture solder-type contacts for any specific application.
- For information about plating and contact pressure, see pages 346 and 347.

★PEW12

- Minimum order quantity is provided. When ordering, specify your requirements by multiplying the quantity.
- Mini-Applicators are for use with automachines. Refer to P.437
- Strip Form contacts are for use with Mini-Applicators (automachines) and Loose-Piece contacts are for Hand tools.

✻1 Wire insulation diameters are for loose-piece contacts. For strip form contacts, see 114-5148.

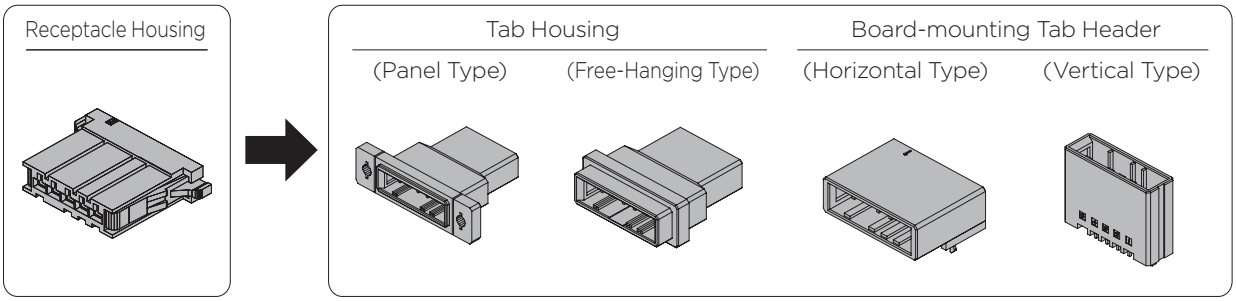
The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings. See from page 437 for details on applicable tools.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100S — Standard 1 Row Type

Part Number Chart

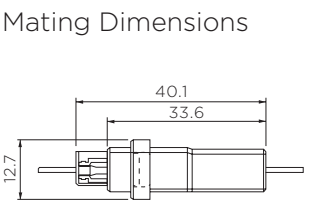


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
3	Black	X	1-178288-3	Gold	1-178802-3	1-177648-3	S	1-178293-2	1-178313-2
				Gold				1-178293-3	1-178313-3
				Tin				1-178293-5	1-178313-5
	Natural	X	—	Tin	—	—	S	—	6-178313-5
	Black	Y	2-178288-3	Gold	2-178802-3	2-177648-3	S	2-178293-2	2-178313-2
				Gold				2-178293-3	2-178313-3
				Tin				2-178293-5	2-178313-5
4	Black	X	1-178288-4	Gold	—	—	—	1-178294-2	1-178314-2
				Gold				1-178294-3	1-178314-3
				Tin				1-178294-5	1-178314-5
	Black	Y	2-178288-4	Gold	—	—	—	2-178294-2	2-178314-2
				Gold				2-178294-3	2-178314-3
				Tin				—	2-178314-5
5	Black	X	1-178288-5	Gold	1-178802-5	1-177648-5	L	1-178295-2	1-178315-2
				Gold				1-178295-3	1-178315-3
				Tin				1-178295-5	1-178315-5
6	Black	X	1-178288-6	Gold	—	—	—	1-178296-2	1-178316-2
				Gold				1-178296-3	1-178316-3
				Tin				1-178296-5	1-178316-5
	Black	Y	2-178288-6	Gold	—	—	—	2-178296-2	2-178316-2
				Gold				—	2-178316-3
				Tin				—	2-178316-5
8	Black	X	1-178288-7	Gold	1-178802-7	1-177648-7	L	1-178297-2	1-178317-2
				Gold				1-178297-3	1-178317-3
				Tin				1-178297-5	1-178317-5
10	Black	X	1-178288-8	Gold	1-178802-8	1-177648-8	L	1-178298-2	1-178318-2
				Gold				1-178298-3	1-178318-3
				Tin				1-178298-5	1-178318-5
	Black	Y	2-178288-8	Gold	2-178802-8	2-177648-8	L	2-178298-3	2-178318-2

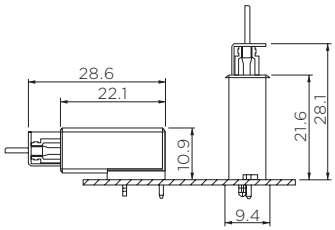
Information about related products

Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory ..... Refer to P.442

Mating Dimensions



Panel/Free-Hanging Type



Horizontal/Vertical Type

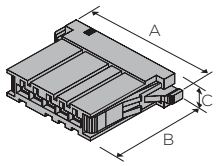
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100S — Standard 1 Row Type

Dimensions

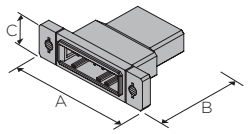
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-178288-3	26.8	22.8	7.2
	Y	—	Black	2-178288-3			
4	X	—	Black	1-178288-4	30.6	22.8	7.2
	Y	—	Black	2-178288-4			
5	X	—	Black	1-178288-5	34.4	22.8	7.2
6	X	—	Black	1-178288-6	38.2	22.8	7.2
	Y	—	Black	2-178288-6			
8	X	—	Black	1-178288-7	45.8	22.8	7.2
10	X	—	Black	1-178288-8	53.4	22.8	7.2
	Y	—	Black	2-178288-8			

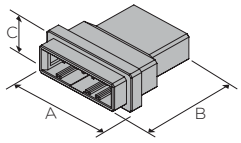
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-178802-3	40.0	33.6	12.7
	Y	—	Black	2-178802-3			
5	X	—	Black	1-178802-5	47.0	33.6	12.7
8	X	—	Black	1-178802-7	59.0	33.6	12.7
10	X	—	Black	1-178802-8	67.0	33.6	12.7
	Y	—	Black	2-178802-8			

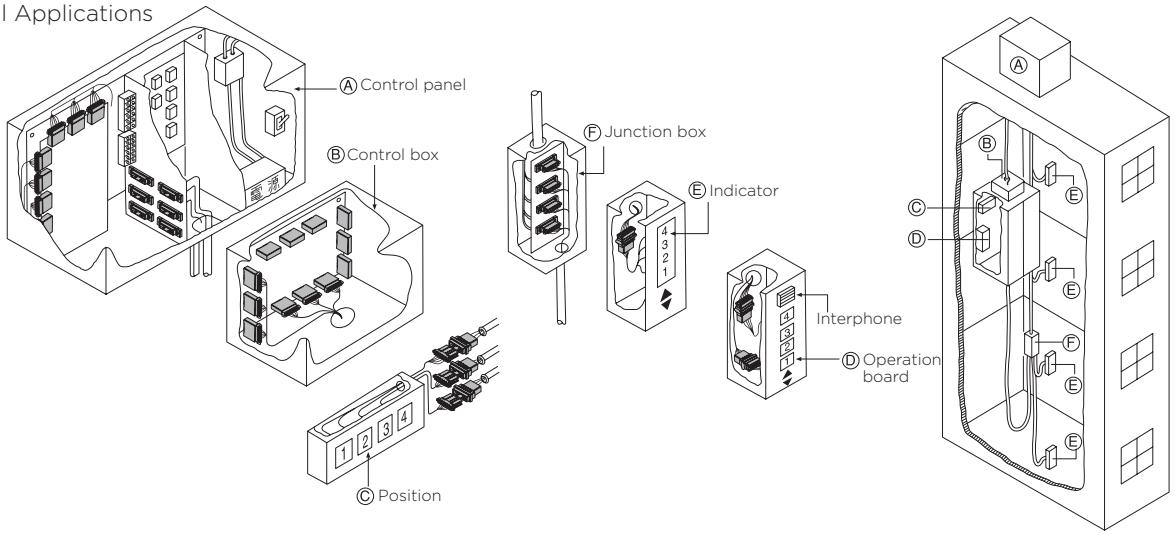
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-177648-3	25.6	33.6	12.7
	Y	—	Black	2-177648-3			
5	X	—	Black	1-177648-5	33.2	33.6	12.7
8	X	—	Black	1-177648-7	44.6	33.6	12.7
10	X	—	Black	1-177648-8	52.2	33.6	12.7
	Y	—	Black	2-177648-8			

Application

Elevator-Typical Applications



4

Wire to Board Connectors

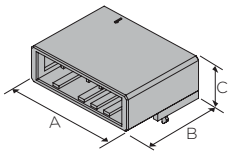
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100S — Standard 1 Row Type

■ Board-mounting Tab Header

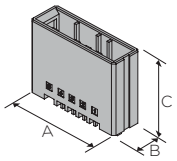
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1-178293-2	21.6	22.1	10.9
		Gold	Black	1-178293-3			
		Tin	Black	1-178293-5			
	Y	Gold	Black	2-178293-2			
		Gold	Black	2-178293-3			
		Tin	Black	2-178293-5			
4	X	Gold	Black	1-178294-2	25.4	22.1	10.9
		Gold	Black	1-178294-3			
		Tin	Black	1-178294-5			
	Y	Gold	Black	2-178294-2			
		Gold	Black	2-178294-3			
5	X	Gold	Black	1-178295-2	29.2	22.1	10.9
		Gold	Black	1-178295-3			
		Tin	Black	1-178295-5			
6	X	Gold	Black	1-178296-2	33.1	22.1	10.9
		Gold	Black	1-178296-3			
		Tin	Black	1-178296-5			
	Y	Gold	Black	2-178296-2			
8	X	Gold	Black	1-178297-2	40.7	22.1	10.9
		Gold	Black	1-178297-3			
		Tin	Black	1-178297-5			
10	X	Gold	Black	1-178298-2	48.3	22.1	10.9
		Gold	Black	1-178298-3			
		Tin	Black	1-178298-5			
	Y	Gold	Black	2-178298-3			

■ Board-mounting Tab Header

Vertical Type



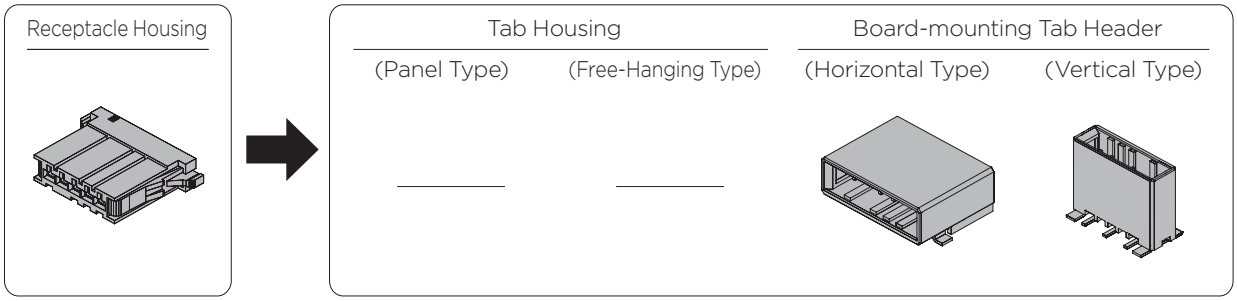
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1-178313-2	21.6	9.4	21.6
		Gold	Black	1-178313-3			
		Tin	Black	1-178313-5			
		Tin	Natural	6-178313-5			
	Y	Gold	Black	2-178313-2			
		Gold	Black	2-178313-3			
		Tin	Black	2-178313-5			
4	X	Gold	Black	1-178314-2	25.4	9.4	21.6
		Gold	Black	1-178314-3			
		Tin	Black	1-178314-5			
	Y	Gold	Black	2-178314-2			
		Gold	Black	2-178314-3			
		Tin	Black	2-178314-5			
5	X	Gold	Black	1-178315-2	29.2	9.4	21.6
		Gold	Black	1-178315-3			
		Tin	Black	1-178315-5			
6	X	Gold	Black	1-178316-2	33.1	9.4	21.6
		Gold	Black	1-178316-3			
		Tin	Black	1-178316-5			
	Y	Gold	Black	2-178316-2			
		Gold	Black	2-178316-3			
		Tin	Black	2-178316-5			
8	X	Gold	Black	1-178317-2	40.7	9.4	21.6
		Gold	Black	1-178317-3			
		Tin	Black	1-178317-5			
10	X	Gold	Black	1-178318-2	48.3	9.4	21.6
		Gold	Black	1-178318-3			
		Tin	Black	1-178318-5			
	Y	Gold	Black	2-178318-2			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

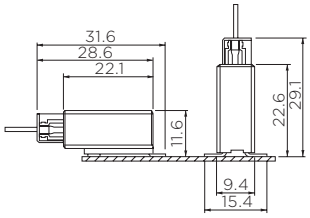
D-3100S — SMT Type

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
5	Black	X	1-178288-5	Gold	—	—	1-177662-2	1-177665-2
8	Black	X	1-178288-7	Gold	—	—	1-179188-2	—
					—	—	1-179188-3	

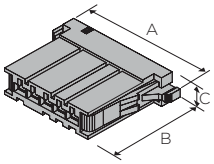
Mating Dimensions



Horizontal/Vertical Type

Dimensions

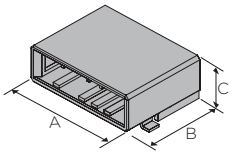
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
5	X	—	Black	1-178288-5	34.4	22.8	7.2
8	X	—	Black	1-178288-7	45.8	22.8	7.2

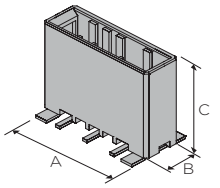
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
5	X	Gold	Black	1-177662-2	29.2	22.1	11.6
8	X	Gold	Black	1-179188-2	40.7	22.1	11.6
		Gold	Black	1-179188-3			

Vertical Type



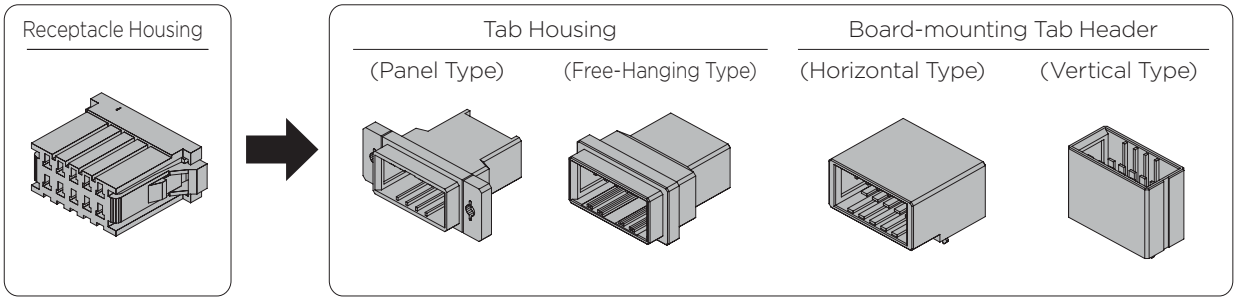
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
5	X	Gold	Black	1-177665-2	29.2	9.4	22.6

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100D — Standard 2 Row Type

Part Number Chart

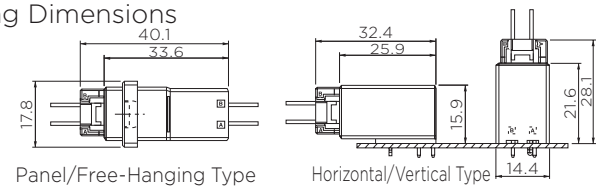


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
6	Black	X	178289-3	Gold	178803-3	178964-3	S	178303-2	178323-2
				Gold				178303-3	178323-3
				Tin				178303-5	178323-5
8	Black	X	178289-4	Gold	—	178964-4	S	1717412-2	1903601-2
								1717412-3	—
				Tin				—	1903601-5
10	Black	X	178289-5	Gold	178803-5	178964-5	L	178305-2	178325-2
				Gold				178305-3	178325-3
				Tin				178305-5	178325-5
12	Black	X	178289-6	Gold	178803-6	178964-6	L	178306-2	178326-2
				Gold				178306-3	178326-3
				Tin				178306-5	178326-5
16	Black	X	178289-7	Gold	178803-7	178964-7	L	178307-2	178327-2
				Gold				178307-3	178327-3
				Tin				178307-5	178327-5
20	Black	X	178289-8	Gold	178803-8	178964-8	L	178308-2	178328-2
				Gold				178308-3	178328-3
				Tin				178308-5	178328-5

Information about related products

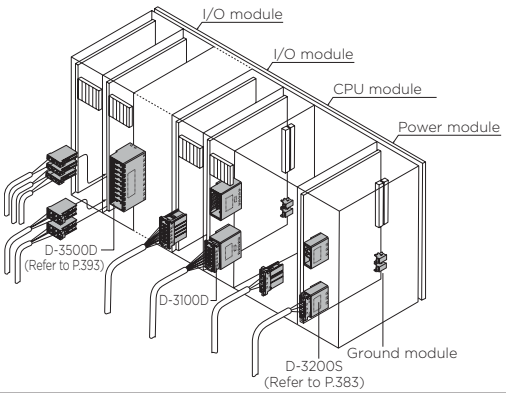
Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory..... Refer to P.442

Mating Dimensions



Application

Example of application for programmable controller



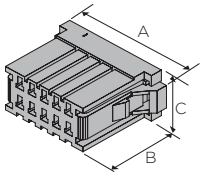
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100D — Standard 2 Row Type

Dimensions

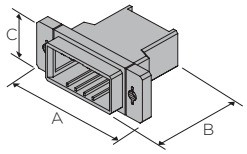
■ Receptacle Housing



No. of Pos.	Key-ing	Plat-ing	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	178289-3	24.4	22.8	12.5
8	X	—	Black	178289-4	28.2	22.8	12.5
10	X	—	Black	178289-5	32.0	22.8	12.5
12	X	—	Black	178289-6	35.8	22.8	12.5
16	X	—	Black	178289-7	42.7	22.8	12.5
20	X	—	Black	178289-8	51.0	22.8	12.5

■ Tab Housing

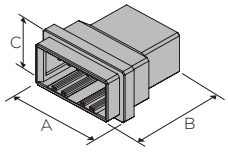
Panel Type



No. of Pos.	Key-ing	Plat-ing	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	178803-3	40.0	33.6	17.8
10	X	—	Black	178803-5	47.0	33.6	17.8
12	X	—	Black	178803-6	51.0	33.6	17.8
16	X	—	Black	178803-7	59.0	33.6	17.8
20	X	—	Black	178803-8	67.0	33.6	17.8

■ Tab Housing

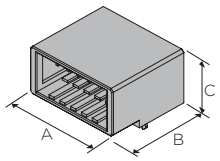
Free-Hanging Type



No. of Pos.	Key-ing	Plat-ing	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	178964-3	25.6	33.6	17.8
8	X	—	Black	178964-4	29.4	33.6	17.8
10	X	—	Black	178964-5	33.2	33.6	17.8
12	X	—	Black	178964-6	37.0	33.6	17.8
16	X	—	Black	178964-7	44.6	33.6	17.8
20	X	—	Black	178964-8	52.2	33.6	17.8

■ Board-mounting Tab Header

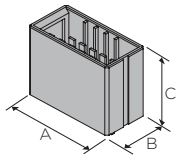
Horizontal Type



No. of Pos.	Key-ing	Plat-ing	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	178303-2	21.6	25.9	15.9
	X	Gold	Black	178303-3			
	X	Tin	Black	178303-5			
8	X	Gold	Black	1717412-2	25.4	25.9	15.9
	X	Gold	Black	1717412-3			
10	X	Gold	Black	178305-2	29.2	25.9	15.9
	X	Gold	Black	178305-3			
	X	Tin	Black	178305-5			
12	X	Gold	Black	178306-2	33.1	25.9	15.9
	X	Gold	Black	178306-3			
	X	Tin	Black	178306-5			
16	X	Gold	Black	178307-2	40.7	25.9	15.9
	X	Gold	Black	178307-3			
	X	Tin	Black	178307-5			
20	X	Gold	Black	178308-2	48.3	25.9	15.9
	X	Gold	Black	178308-3			
	X	Tin	Black	178308-5			

■ Board-mounting Tab Header

Vertical Type



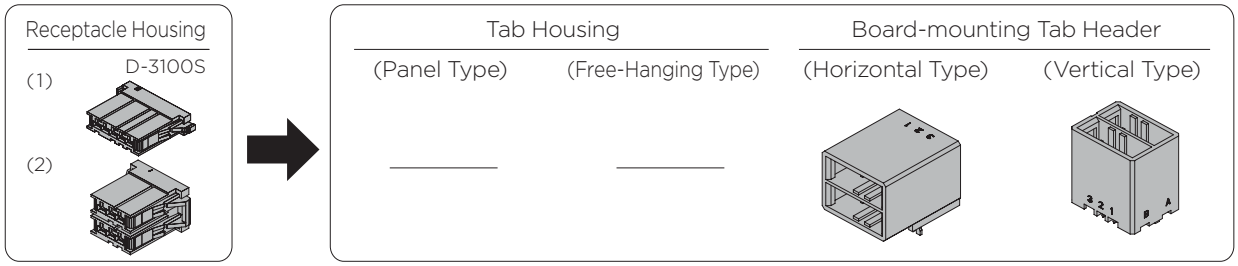
No. of Pos.	Key-ing	Plat-ing	Color	Part Number	Dimensions		
					A	B	C
6	X	Gold	Black	178323-2	21.6	14.4	21.6
	X	Gold	Black	178323-3			
	X	Tin	Black	178323-5			
8	X	Gold	Black	1903601-2	25.4	14.4	21.6
	X	Tin	Black	1903601-5			
10	X	Gold	Black	178325-2	29.2	14.4	21.6
	X	Gold	Black	178325-3			
	X	Tin	Black	178325-5			
12	X	Gold	Black	178326-2	33.1	14.4	21.6
	X	Gold	Black	178326-3			
	X	Tin	Black	178326-5			
16	X	Gold	Black	178327-2	40.7	14.4	21.6
	X	Gold	Black	178327-3			
	X	Tin	Black	178327-5			
20	X	Gold	Black	178328-2	48.3	14.4	21.6
	X	Gold	Black	178328-3			
	X	Tin	Black	178328-5			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3100M — Standard Modular 2 Row Type

Part Number Chart

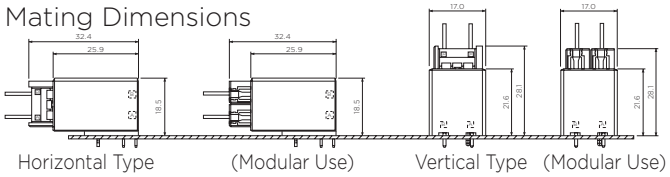


No. of Pos.	Color	Keying	Receptacle Housing (Use any listed below) 1 Row 3 position (1)	Receptacle Housing (Use any listed below) 2 Row 6 position (2)	Plating	Tab Housing		Board-mounting Tab Header	
						Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
6	Black	XX	1-178288-3 (2 pcs)	1-178127-6 (1 pcs)	Gold	—	—	1-178137-2	1-178141-2
					Gold	—	—	1-178137-3	1-178141-3
					Tin	—	—	1-178137-5	1-178141-5
	Black	YY	2-178288-3 (2 pcs)	2-178127-6 (1 pcs)	Gold	—	—	2-178137-2	—
					Tin	—	—	2-178137-5	
	Black	XY	1-178288-3 (1 pcs) 2-178288-3 (1 pcs)	3-178127-6 (1 pcs)	Gold	—	—	3-178137-2	3-178141-2
					Gold	—	—	3-178137-3	3-178141-3
					Tin	—	—	3-178137-5	3-178141-5

Information about related products

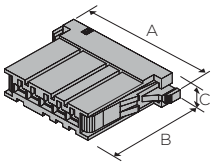
Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372

Mating Dimensions

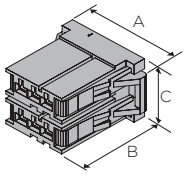


Dimensions

■ Receptacle Housing



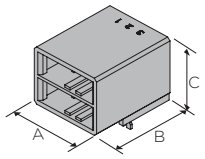
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions A	Dimensions B	Dimensions C
3	X	—	Black	1-178288-3	26.8	22.8	7.2
	Y	—	Black	2-178288-3			



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions A	Dimensions B	Dimensions C
6	XX	—	Black	1-178127-6	24.8	22.8	14.8
	YY	—	Black	2-178127-6			
	XY	—	Black	3-178127-6			

■ Board-mounting Tab Header

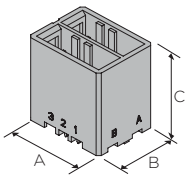
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions A	Dimensions B	Dimensions C
6	XX	Gold	Black	1-178137-2	21.6	25.9	18.5
		Gold	Black	1-178137-3			
		Tin	Black	1-178137-5			
	YY	Gold	Black	2-178137-2			
		Tin	Black	2-178137-5			
	XY	Gold	Black	3-178137-2			
		Gold	Black	3-178137-3			
		Tin	Black	3-178137-5			

■ Board-mounting Tab Header

Vertical Type



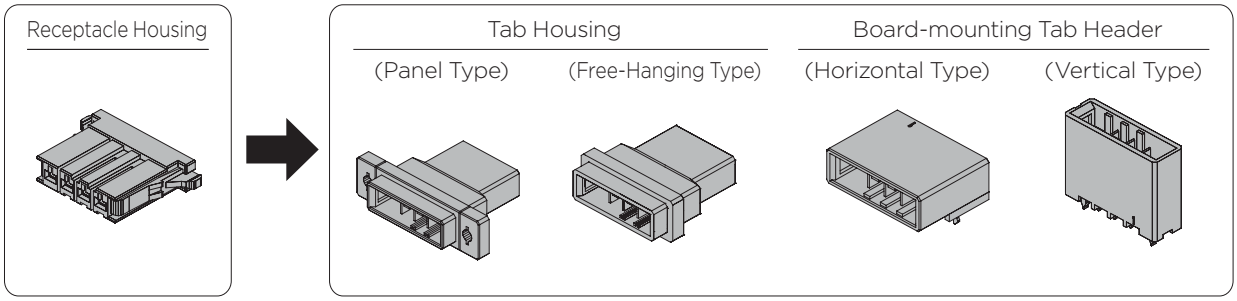
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions A	Dimensions B	Dimensions C
6	XX	Gold	Black	1-178141-2	21.6	17.0	21.6
		Gold	Black	1-178141-3			
		Tin	Black	1-178141-5			
	XY	Gold	Black	3-178141-2			
		Gold	Black	3-178141-3			
		Tin	Black	3-178141-5			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200S — High-Voltage 2 Row Type

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
2	Black	X	1-178128-2	Gold	1-179553-2	1-179552-2	S	1-179276-2	1-917337-2
				Gold				1-179276-3	1-917337-3
				Tin				1-179276-5	1-917337-5
	Black	Y	2-178128-2	Gold	2-179553-2	2-179552-2	S	2-179276-2	2-917337-2
				Gold				2-179276-3	2-917337-3
				Tin				—	2-917337-5
3	Black	X	1-178128-3	Gold	1-179553-3	1-179552-3	S	1-178138-2	1-178136-2
				Gold				1-178138-3	1-178136-3
				Tin				1-178138-5	1-178136-5
	Black	Y	2-178128-3	Gold	2-179553-3	2-179552-3	S	2-178138-2	2-178136-2
				Gold				2-178138-3	2-178136-3
				Tin				2-178138-5	2-178136-5
	Black	Z	3-178128-3	Tin	—	—	—	—	3-178136-5
4	Black	X	1-178128-4	Gold	1-179553-4	1-179552-4	S	1-179277-2	1-917338-2
				Gold				1-179277-3	1-917338-3
				Tin				1-179277-5	1-917338-5
	Black	Y	2-178128-4	Gold	2-179553-4	2-179552-4	S	2-179277-2	2-917338-2
				Gold				2-179277-3	2-917338-3
				Tin				2-179277-5	2-917338-5
5	Black	X	1-178128-5	Gold	—	—	—	1-316130-2	1-316132-2
				Gold				1-316130-3	1-316132-3
				Tin				1-316130-5	1-316132-5
	Black	Y	2-178128-5	Gold	—	—	—	—	2-316132-2
				Gold				2-316130-3	2-316132-3
				Tin				—	2-316132-5
6	Black	X	1-178128-6	Gold	—	—	—	1-316131-2	1-316133-2
				Gold				1-316131-3	1-316133-3
				Tin				1-316131-5	1-316133-5
	Black	Y	2-178128-6	Gold	—	—	—	2-316131-2	2-316133-2
				Gold				—	2-316133-3

Information about related products

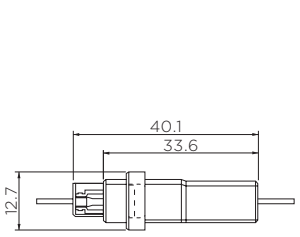
Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory ..... Refer to P.442

Note: All Part Numbers are RoHS compliant.

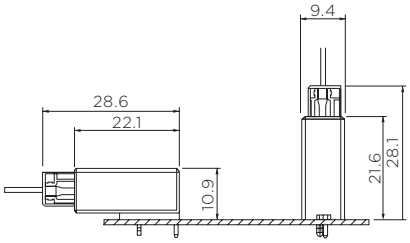
Dynamic Series Connectors

D-3200S — High-Voltage 2 Row Type

Mating Dimensions



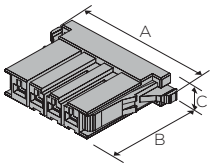
Panel/Free-Hanging Type



Horizontal/Vertical Type

Dimensions

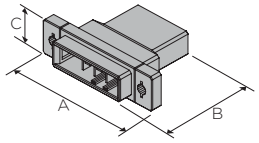
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-178128-2	24.6	22.8	7.2
	Y	—	Black	2-178128-2			
3	X	—	Black	1-178128-3	29.7	22.8	7.2
	Y	—	Black	2-178128-3			
	Z	—	Black	3-178128-3			
4	X	—	Black	1-178128-4	34.8	22.8	7.2
	Y	—	Black	2-178128-4			
5	X	—	Black	1-178128-5	39.9	22.8	7.2
	Y	—	Black	2-178128-5			
6	X	—	Black	1-178128-6	45.0	22.8	7.2
	Y	—	Black	2-178128-6			

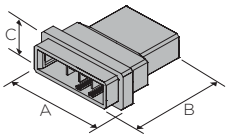
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179553-2	36.8	33.6	12.7
	Y	—	Black	2-179553-2			
3	X	—	Black	1-179553-3	41.9	33.6	12.7
	Y	—	Black	2-179553-3			
4	X	—	Black	1-179553-4	47.0	33.6	12.7
	Y	—	Black	2-179553-4			

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179552-2	23.0	33.6	12.7
	Y	—	Black	2-179552-2			
3	X	—	Black	1-179552-3	28.1	33.6	12.7
	Y	—	Black	2-179552-3			
4	X	—	Black	1-179552-4	33.2	33.6	12.7
	Y	—	Black	2-179552-4			

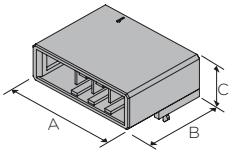
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200S — High-Voltage 2 Row Type

■ Board-mounting Tab Header

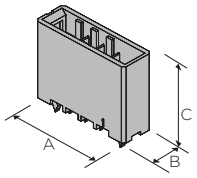
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-179276-2	19.1	22.1	10.9
		Gold	Black	1-179276-3			
		Tin	Black	1-179276-5			
	Y	Gold	Black	2-179276-2			
		Gold	Black	2-179276-3			
3	X	Gold	Black	1-178138-2	24.2	22.1	10.9
		Gold	Black	1-178138-3			
		Tin	Black	1-178138-5			
	Y	Gold	Black	2-178138-2			
		Gold	Black	2-178138-3			
		Tin	Black	2-178138-5			
4	X	Gold	Black	1-179277-2	29.2	22.1	10.9
		Gold	Black	1-179277-3			
		Tin	Black	1-179277-5			
	Y	Gold	Black	2-179277-2			
		Gold	Black	2-179277-3			
		Tin	Black	2-179277-5			
5	X	Gold	Black	1-316130-2	34.3	22.1	10.9
		Gold	Black	1-316130-3			
		Tin	Black	1-316130-5			
	Y	Gold	Black	2-316130-3			
6	X	Gold	Black	1-316131-2	39.4	22.1	10.9
		Gold	Black	1-316131-3			
		Tin	Black	1-316131-5			
	Y	Gold	Black	2-316131-2			

■ Board-mounting Tab Header

Vertical Type



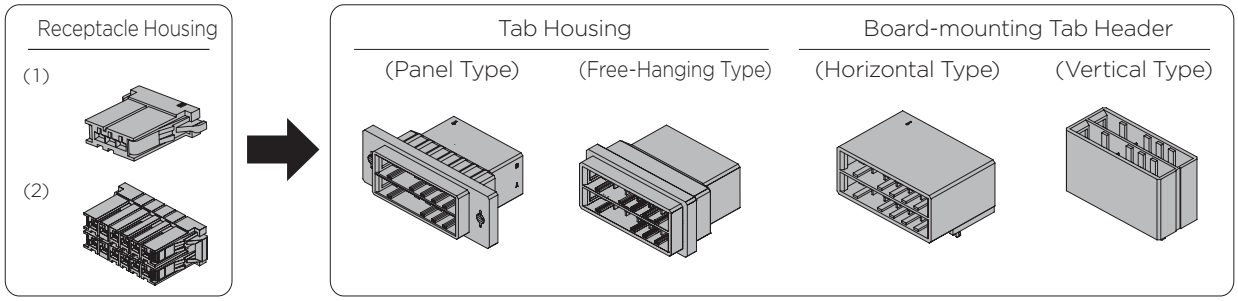
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-917337-2	19.1	9.4	21.6
		Gold	Black	1-917337-3			
		Tin	Black	1-917337-5			
	Y	Gold	Black	2-917337-2			
		Gold	Black	2-917337-3			
		Tin	Black	2-917337-5			
3	X	Gold	Black	1-178136-2	24.2	9.4	21.6
		Gold	Black	1-178136-3			
		Tin	Black	1-178136-5			
	Y	Gold	Black	2-178136-2			
		Gold	Black	2-178136-3			
		Tin	Black	2-178136-5			
	Z	Tin	Black	3-178136-5			
4	X	Gold	Black	1-917338-2	29.2	9.4	21.6
		Gold	Black	1-917338-3			
		Tin	Black	1-917338-5			
	Y	Gold	Black	2-917338-2			
		Gold	Black	2-917338-3			
		Tin	Black	2-917338-5			
5	X	Gold	Black	1-316132-2	34.3	9.4	21.6
		Gold	Black	1-316132-3			
		Tin	Black	1-316132-5			
	Y	Gold	Black	2-316132-2			
		Gold	Black	2-316132-3			
		Tin	Black	2-316132-5			
6	X	Gold	Black	1-316133-2	39.4	9.4	21.6
		Gold	Black	1-316133-3			
		Tin	Black	1-316133-5			
	Y	Gold	Black	2-316133-2			
		Gold	Black	2-316133-3			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200M — High-Voltage Modular 2 Row Type

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing (2)	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
6	—	XX	1-178129-6	Gold	1-179555-3	1-179554-3	S	1-178139-2	1-178140-2
				Gold			S	1-178139-3	1-178140-3
				Tin			S	1-178139-5	1-178140-5
	—	YY	2-178129-6	Gold	2-179555-3	2-179554-3	S	2-178139-2	2-178140-2
				Gold			S	2-178139-3	2-178140-3
				Tin			S	2-178139-5	2-178140-5
	—	XY	3-178129-6	Gold	3-179555-3	3-179554-3	S	3-178139-2	3-178140-2
				Gold			S	3-178139-3	3-178140-3
				Tin			S	3-178139-5	3-178140-5
	—	YX	✻(1)	Gold	—	—	—	4-178139-2	—
	—	ZX	✻(1)	Tin	—	—	—	6-178139-5	—
10	—	XX	1-917659-5	Gold	—	—	—	1-316080-2	1-917657-2
				Gold				1-316080-3	1-917657-3
				Tin				1-316080-5	1-917657-5
	—	YY	2-917659-5	Gold	—	—	—	2-316080-2	2-917657-2
				Gold				2-316080-3	2-917657-3
				Tin				2-316080-5	2-917657-5
	—	XY	3-917659-5	Gold	—	—	—	3-316080-2	3-917657-2
				Gold				3-316080-3	3-917657-3
				Tin				3-316080-5	3-917657-5
12	—	XX	1-917659-6	Gold	1-179555-6	1-179554-6	L	1-316081-2	1-917658-2
				Gold				1-316081-3	1-917658-3
				Tin				1-316081-5	1-917658-5
	—	YY	2-917659-6	Gold	2-179555-6	2-179554-6	L	2-316081-2	2-917658-2
				Gold				2-316081-3	2-917658-3
				Tin				2-316081-5	2-917658-5
	—	XY	3-917659-6	Gold	3-179555-6	3-179554-6	L	3-316081-2	3-917658-2
				Gold				3-316081-3	3-917658-3
				Tin				—	3-917658-5
20	—	XX	1-917659-8	—	1-179555-8	—	—	—	—

Information about related products

Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory ..... Refer to P.442

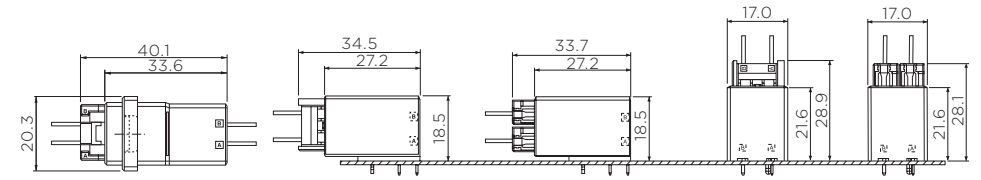
✻(1) Refer to receptacle and housing on page 383 for D-3200S. Use 1-178128-3 or 3-178128-3.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200M — High-Voltage Modular 2 Row Type

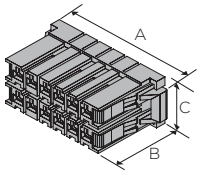
Mating Dimensions



Panel/Free-Hanging Type | Horizontal Type | (Modular Use) | Vertical Type | (Modular Use)

Dimensions

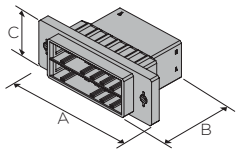
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-178129-6	27.3	22.8	14.8
	YY	—	Black	2-178129-6			
	XY	—	Black	3-178129-6			
10	XX	—	Black	1-917659-5	37.5	22.8	14.8
	YY	—	Black	2-917659-5			
	XY	—	Black	3-917659-5			
12	XX	—	Black	1-917659-6	42.5	22.8	14.8
	YY	—	Black	2-917659-6			
	XY	—	Black	3-917659-6			
20	XX	—	Black	1-917659-8	62.9	22.8	14.8

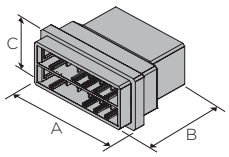
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-179555-3	41.9	33.6	20.3
	YY	—	Black	2-179555-3			
	XY	—	Black	3-179555-3			
12	XX	—	Black	1-179555-6	57.9	33.6	20.3
	YY	—	Black	2-179555-6			
	XY	—	Black	3-179555-6			
20	XX	—	Black	1-179555-8	78.2	33.6	20.3

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-179554-3	28.1	33.6	20.3
	YY	—	Black	2-179554-3			
	XY	—	Black	3-179554-3			
12	XX	—	Black	1-179554-6	43.4	33.6	20.3
	YY	—	Black	2-179554-6			
	XY	—	Black	3-179554-6			

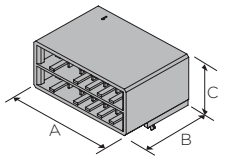
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200M — High-Voltage Modular 2 Row Type

■ Board-mounting Tab Header

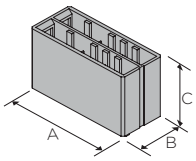
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	Gold	Black	1-178139-2	24.2	27.2	18.5
		Gold	Black	1-178139-3			
		Tin	Black	1-178139-5			
	YY	Gold	Black	2-178139-2			
		Gold	Black	2-178139-3			
		Tin	Black	2-178139-5			
	XY	Gold	Black	3-178139-2			
		Gold	Black	3-178139-3			
		Tin	Black	3-178139-5			
	YX	Gold	Black	4-178139-2			
	ZX	Tin	Black	6-178139-5			
10	XX	Gold	Black	1-316080-2	34.3	27.2	18.5
		Gold	Black	1-316080-3			
		Tin	Black	1-316080-5			
	YY	Gold	Black	2-316080-2			
		Gold	Black	2-316080-3			
		Tin	Black	2-316080-5			
	XY	Gold	Black	3-316080-2			
		Gold	Black	3-316080-3			
		Tin	Black	3-316080-5			
12	XX	Gold	Black	1-316081-2	39.4	27.2	18.5
		Gold	Black	1-316081-3			
		Tin	Black	1-316081-5			
	YY	Gold	Black	2-316081-2			
		Gold	Black	2-316081-3			
		Tin	Black	2-316081-5			
	XY	Gold	Black	3-316081-2			
		Gold	Black	3-316081-3			

■ Board-mounting Tab Header

Vertical Type



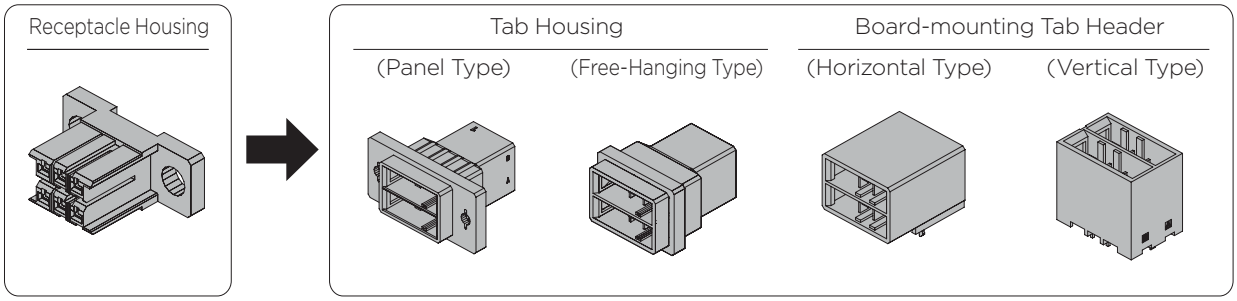
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	Gold	Black	1-178140-2	24.2	17.0	21.6
		Gold	Black	1-178140-3			
		Tin	Black	1-178140-5			
	YY	Gold	Black	2-178140-2			
		Gold	Black	2-178140-3			
		Tin	Black	2-178140-5			
	XY	Gold	Black	3-178140-2			
		Gold	Black	3-178140-3			
		Tin	Black	3-178140-5			
10	XX	Gold	Black	1-917657-2	34.3	17.0	21.6
		Gold	Black	1-917657-3			
		Tin	Black	1-917657-5			
	YY	Gold	Black	2-917657-2			
		Gold	Black	2-917657-3			
		Tin	Black	2-917657-5			
	XY	Gold	Black	3-917657-2			
		Gold	Black	3-917657-3			
		Tin	Black	3-917657-5			
12	XX	Gold	Black	1-917658-2	39.4	17.0	21.6
		Gold	Black	1-917658-3			
		Tin	Black	1-917658-5			
	YY	Gold	Black	2-917658-2			
		Gold	Black	2-917658-3			
		Tin	Black	2-917658-5			
	XY	Gold	Black	3-917658-2			
		Gold	Black	3-917658-3			
		Tin	Black	3-917658-5			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3200M — High-Voltage Drawer 2 Row Type

Part Number Chart



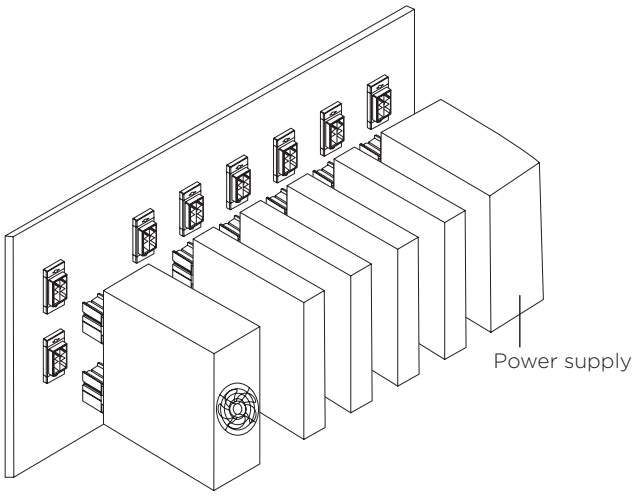
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
6	Black	XX	1-917266-3	Gold	1-179555-3	1-179554-3	1-178139-2	1-178140-2
				Gold			1-178139-3	1-178140-3
				Tin			1-178139-5	1-178140-5

Information about related products

Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory ..... Refer to P.442

Application

Example of application in compact disc device

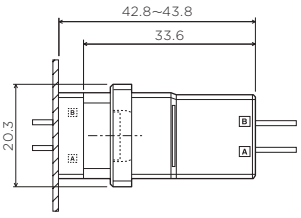


Note: All Part Numbers are RoHS compliant.

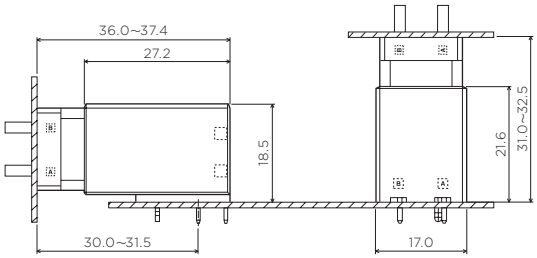
Dynamic Series Connectors

D-3200M — High-Voltage Drawer 2 Row Type

Mating Dimensions



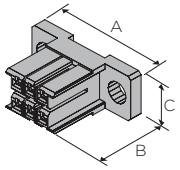
Panel/Free-Hanging Type



Horizontal/Vertical Type

Dimensions

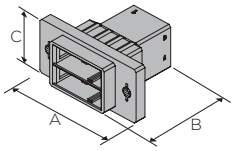
■ Receptacle Housing
(Drawer Type)



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-917266-3	40.0	25.7	15.4

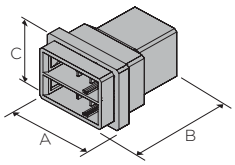
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-179555-3	41.9	33.6	20.3

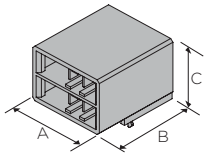
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-179554-3	28.1	33.6	20.3

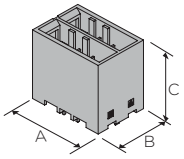
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	Gold	Black	1-178139-2	24.2	27.2	18.5
		Gold	Black	1-178139-3			
		Tin	Black	1-178139-5			

Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	Gold	Black	1-178140-2	24.2	17.0	21.6
		Gold	Black	1-178140-3			
		Tin	Black	1-178140-5			

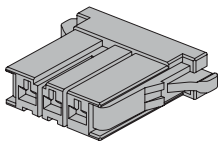
Note: All Part Numbers are RoHS compliant.

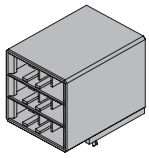
Dynamic Series Connectors

D-3200T — High-Voltage Modular 3 Row Type

Part Number Chart

Receptacle Housing



Tab Housing		Board-mounting Tab Header	
(Panel Type)	(Free-Hanging Type)	(Horizontal Type)	(Vertical Type)
———	———		———

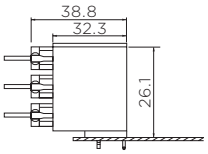
Receptacle Housing (Up to a total of 9 positions)					
1 Row (D-3200S) ✻1			2 Row (D-3200M)		
X	Y	Z	XX	YY	XY
3	—	—	—	—	—
1	—	—	1	—	—
2	1	—	—	—	—
1	—	—	—	—	1
—	1	—	1	—	—
1	—	—	—	1	—
1	2	—	—	—	—
2	1	—	—	—	—
1	—	—	—	—	1
1	1	1	—	—	—
1-178128-3	2-178128-3	3-178128-3	1-178129-6	2-178129-6	3-178129-6

Board-mounting Tab Header			
Horizontal Type (D-3200T)			
No. of Pos.	Keying	Part Number	Plating
9	XXX	1-1123624-2	Gold
		1-1123624-5	Tin
	XXY	3-1123624-2	Gold
		3-1123624-5	Tin
	YYX	4-1123624-2	Gold
		4-1123624-5	Tin
	XYX	5-1123624-2	Gold
		5-1123624-5	Tin
	XYZ	9-1123624-2	Gold

Information about related products

Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
✻1: Refer to P.383

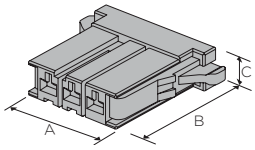
Mating Dimensions



Horizontal Type

Dimensions

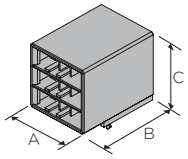
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-178128-3	29.7	22.8	7.2
	Y	—	Black	2-178128-3			
	Z	—	Black	3-178128-3			
6	XX	—	Black	1-178129-6	27.3	22.8	14.8
	YY	—	Black	2-178129-6			
	XY	—	Black	3-178129-6			

■ Board-mounting Tab Header

Horizontal Type



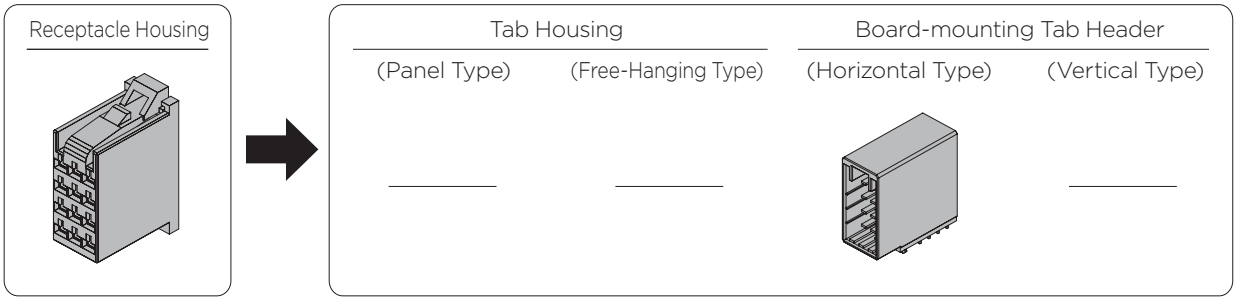
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
9	XXX	Gold	Black	1-1123624-2	24.2	32.3	27.1
		Tin	Black	1-1123624-5			
	XXY	Gold	Black	3-1123624-2			
		Tin	Black	3-1123624-5			
	YYX	Gold	Black	4-1123624-2			
		Tin	Black	4-1123624-5			
	XYX	Gold	Black	5-1123624-2			
		Tin	Black	5-1123624-5			
	XYZ	Gold	Black	9-1123624-2			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3400F — Skyscraper Connectors

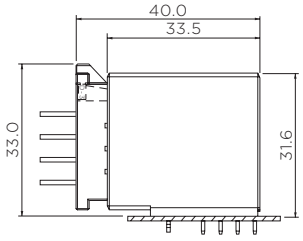
Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
12	Black	—	178214-1	Gold	—	—	178216-2	—
				Gold	—	—	1-178216-2 ✻1	—
				Gold	—	—	178216-3	—
				Tin	—	—	178216-5	—
				Tin	—	—	1-178216-5 ✻2	—
20	Black	—	917249-1	Gold	—	—	917251-2	—
				Gold	—	—	917251-3	—
				Tin	—	—	917251-5	—

✻1 7 positions (pin extraction type). ✻2 9 positions (pin extraction type)

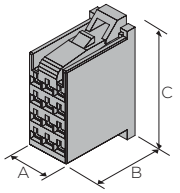
Mating Dimensions



Horizontal Type

Dimensions

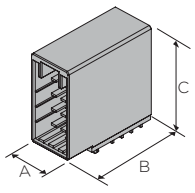
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	178214-1	12.2	22.8	32.1
20	—	—	Black	917249-1	19.8	22.8	32.1

■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	178216-2	15.0	33.5	31.6
	—	Gold	Black	1-178216-2 ✻1			
	—	Gold	Black	178216-3			
	—	Tin	Black	178216-5			
	—	Tin	Black	1-178216-5 ✻2			
20	—	Gold	Black	917251-2	22.6	33.5	31.6
	—	Gold	Black	917251-3			
	—	Tin	Black	917251-5			

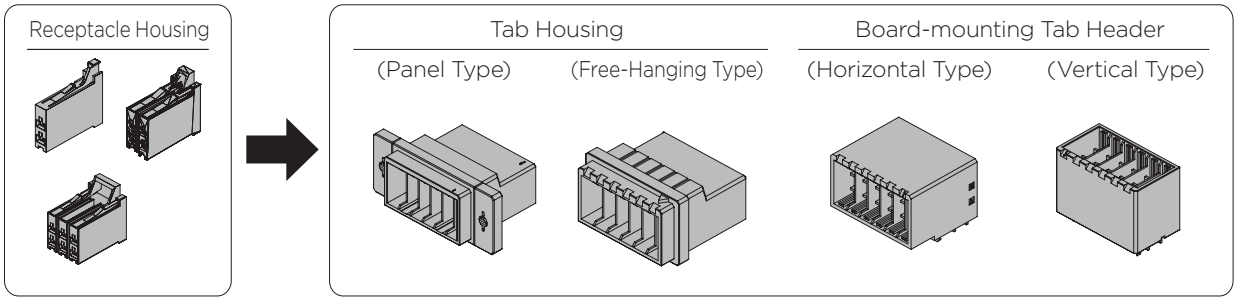
✻1 7 positions (pin extraction type). ✻2 9 positions (pin extraction type)

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3500D — Sensor Connectors

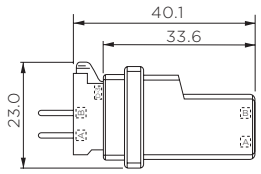
Part Number Chart



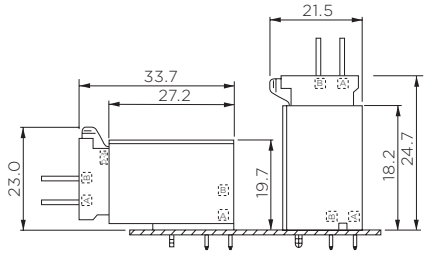
No. of Pos.	Color	Keying	Receptacle Housing (2)	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
2	Black	—	175362-1	—	—	—	—	—	—
			175362-2						
			175362-3		—	—	—	—	—
4	Black	—	175363-1	Gold	—	—	—	1376133-2	—
	White		1-175363-1						
	Black		175363-2 ✻1						
	Blue		2-175363-1						
6	Black	—	1318095-1	—	—	—	—	—	—
			1318095-2						
12	Black	—	—	Gold	917241-6 3-917241-6	917242-6 3-917242-6	S	177555-2	316516-2
				Gold				177555-3	316516-3
				Tin				177555-5	316516-5
20	Black	—	—	Gold	917241-8 3-917241-8	917242-8 3-917242-8	S	175365-2	316517-2
				Gold				175365-3	316517-3
				Tin				175365-5	316517-5

✻1 Small lever type

Mating Dimensions



Panel/Free-Hanging Type



Horizontal/Vertical Type

Information about related products

Applicable Contact ..... Refer to P.375
Performance Specifications ... Refer to P.372
Accessory..... Refer to P.442

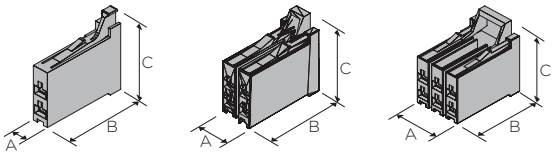
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3500D — Sensor Connectors

Dimensions

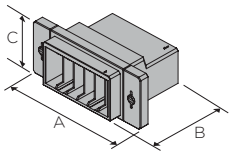
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	—	—	Black	175362-1	4.6	22.8	21.0
	—	—	Black	175362-2			
	—	—	Black	175362-3			
4	—	—	Black	175363-1	9.7	22.8	21.0
	—	—	White	1-175363-1			
	—	—	Blue	2-175363-1			
	—	—	Black	175363-2			
	—	—	Black	175363-3			
6	—	—	Black	1318095-1	14.7	22.8	21.0
	—	—	Black	1318095-2			

■ Tab Housing

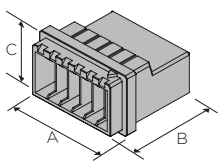
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	917241-6	52.0	33.6	21.5
	—	—	Black	3-917241-6			
20	—	—	Black	917241-8	72.0	33.6	21.5
	—	—	Black	3-917241-8			

■ Tab Housing

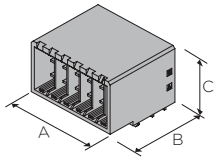
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	917242-6	36.4	33.6	21.5
	—	—	Black	3-917242-6			
20	—	—	Black	917242-8	56.8	33.6	21.5
	—	—	Black	3-917242-8			

■ Board-mounting Tab Header

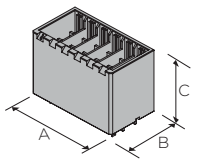
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	Gold	Black	1376133-2	12.2	27.2	19.7
12	—	Gold	Black	177555-2	32.5	27.2	19.7
	—	Gold	Black	177555-3			
	—	Tin	Black	177555-5			
	—	Gold	Black	1-177555-2			
20	—	Gold	Black	175365-2	52.8	27.2	19.7
	—	Gold	Black	175365-3			
	—	Tin	Black	175365-5			

■ Board-mounting Tab Header

Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	316516-2	32.5	18.2	21.6
	—	Gold	Black	316516-3			
	—	Tin	Black	316516-5			
20	—	Gold	Black	316517-2	52.8	18.2	21.6
	—	Gold	Black	316517-3			
	—	Tin	Black	316517-5			

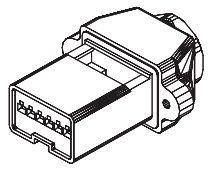
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-3700 — Connectors for Exclusive Use with Servo Motor

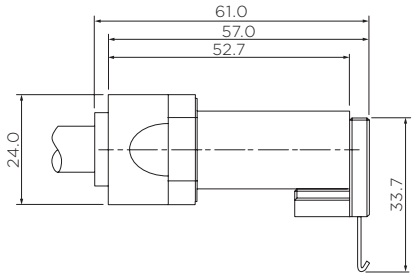
Part Number Chart

Receptacle Connector Kit



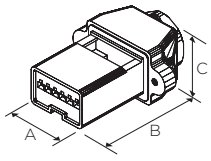
No. of Pos.	W/O Contact	Contact (Part Number1-175218-2) including 6 contacts	Remarks
6	176346-7	176346-8	Products with TÜV
6	1-176346-7	1-176346-8	—

Mating Dimensions



Dimensions

■ Receptacle Connector Kit



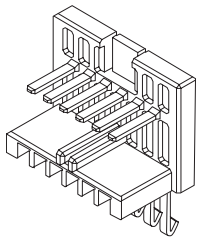
W/O Contact

No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	—	—	Black	176346-7	27.0	52.7	24.0
	—	—	Black	1-176346-7			

Contact (Part Number1-175218-2) including 6 contacts

No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	—	Gold	Black	176346-8	27.0	52.7	24.0
	—	Gold	Black	1-176346-8			

■ Motor-side Tab Header
(Offered for limited usage)

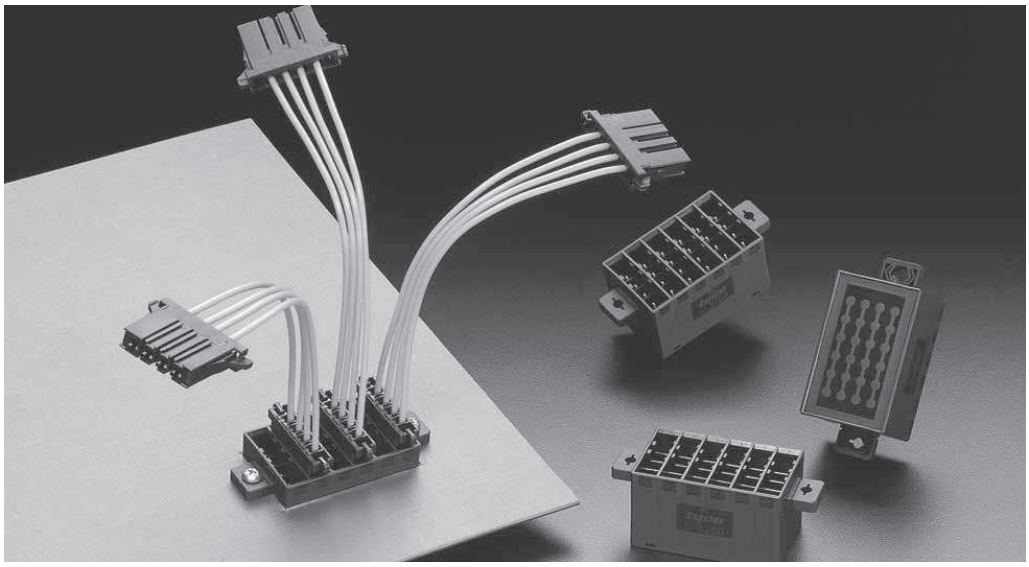


Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

Dyna-Tap Connectors Branching Connectors

Many pieces of FA equipment are produced by assembling sub-units with divided functions in the final assembly line. Powers for each sub-unit of conventional equipment are branched from the power supply bus line over a printed circuit board.
In order to save printed circuit board space, which are being accelerated to be smaller, TE Connectivity has developed Dyna-Tap with which powers can be tapped without printed circuits.
Dyna-Tap Connectors are a part of Dynamic Series, which are developed as power supply connectors (Design right pending).
Dyna-Tap Connectors are optimized for branching power from the power supply bus line.
In order to cope with 3 power-systems, which are most popular in the industry, 6 position connectors are specified.



D-3200 4P common series lined up in six lines.
Issues about branching maintenance and cost are handled with connectors.

D-3100 Series Dynatap 18P (6P x 3 Row)

■ Features

As many connectors will be fixed inevitably on casings where dust protection will be needed, the dust covers are incorporated into its design. With the dust cover, this connector can be applied in various environments.

Applications:
- Power taps in elevator towers
- Power taps for power protective relays
- Power taps among sub-units of semi-conductor producing equipment
- Power supplies for equipment on production lines

Performance Data :
Voltage Rating: 250V AC/DC
Current Rating: 8A (18 pos, with AWG#14)
Position: 6 pos. u 3 = 18 pos.
Durability: 500 Cycles
Product Specification: 108-5754

D-3200 Series Dynatap 24P (4P x 6 Row)

Feature 1 Connectors and contacts from the Dynamic series are compatible

This power supply tap is constructed using the Dynamic series (D-3200S 4P REC) which is well known for its superior contact reliability. Assembly and maintenance costs are much lower compared to a terminal block. Also, existing contacts can be used, which holds down the cost of introducing new types of jigs and inventory management.

Feature 2 Power supply taps can be placed anywhere

Panel cut type added to lineup so it can be combined with relay panel connectors. Also planning to add a bottom mount type for mounting on the bottom of connectors to fix their position on panels.

Feature 3 Low materials and mounting costs save money

Each circuit is electrically commoned so boards and connectors do not need to be mounted. This makes it possible to eliminate the number of parts and assembly procedures for a total cost savings.

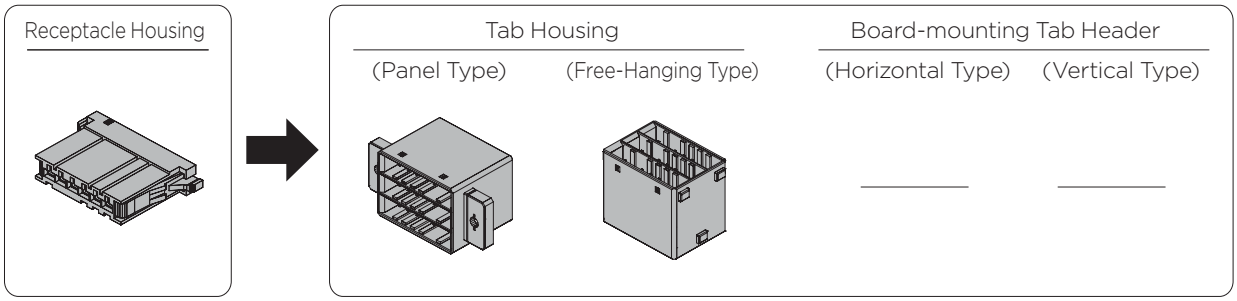
■ Other features

- New gold plated type (0.38 μm) joins tin plated type in the line up.
- Commoning pattern printed on back surface

Dynamic Series Connectors

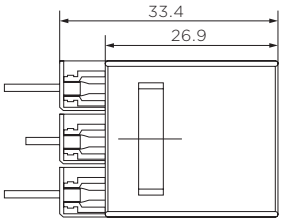
D-3100 Series Dynatap 18P (6P x 3 Row)

Part Number Chart



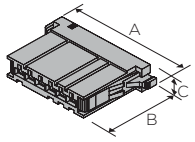
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Through Type	Board-mounting Tab Header	
					Panel Type	Free-Hanging Type		Horizontal Type	Vertical Type
6	Black	X	1-178288-6	—	—	—	—	—	—
18	Black	X	—	Gold	1376807-2	1376807-1	—	—	—
24	Black	X	—	Gold	—	—	1971003-1	—	—
	Black	X	—	Gold	—	—	1971003-2	—	—

Mating Dimensions



Dimensions

■ Receptacle Housing



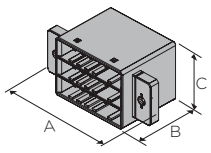
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	X	—	Black	1-178288-6	38.2	22.8	7.2

Through Type

No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
24	X	Gold	Black	1971003-1	33.1	45.7	17.1
	X	Gold	Black	1971003-2	33.1	45.7	35.1

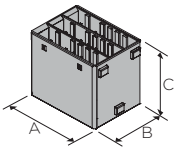
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
18	X	Gold	Black	1376807-2	51.0	26.9	24.6

Free-Hanging Type



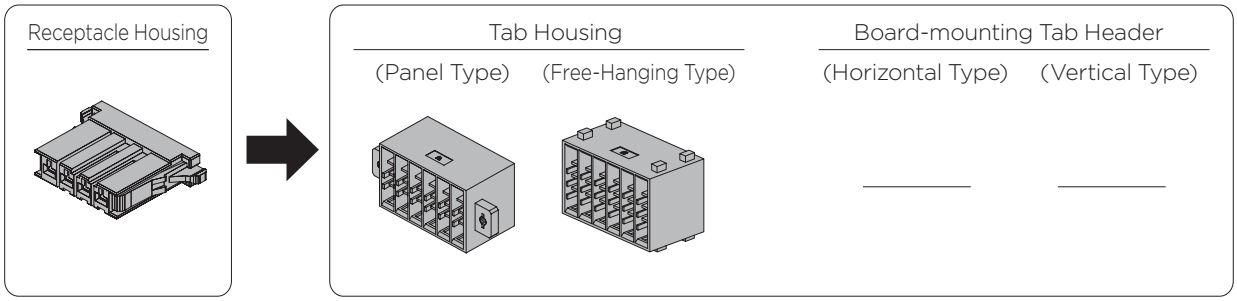
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
18	X	Gold	Black	1376807-1	33.1	24.6	26.9

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

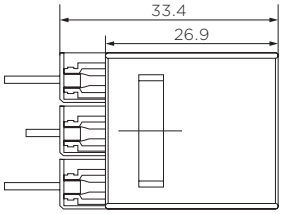
D-3200 Series Dynatap 24P (4P x 6 Row)

Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing			Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	L Fittings	Horizontal Type	Vertical Type
4	Black	X	1-178128-4	—	—	—	—	—	—
24	Black	X	—	Gold	1827691-2	1827691-1	—	—	
	Black	X	—	Tin	1-1827691-2	1-1827691-1	—	—	—
	Black	X	—	Gold	1827691-3	—	—	—	—
	Black	X	—	Tin	1-1827691-3	—	—	—	

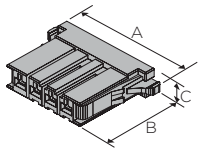
Mating Dimensions



Panel/Free-Hanging Type

Dimensions

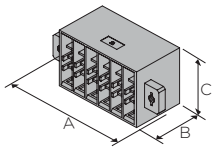
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	X	—	Black	1-178128-4	24.6	22.8	7.2

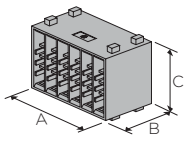
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
24	X	Gold	Black	1827691-2	65.0	26.9	29.2
	X	Tin	Black	1-1827691-2			
	X	Gold	Black	1827691-3			
	X	Tin	Black	1-1827691-3			

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
24	X	Gold	Black	1827691-1	47.5	26.9	29.2
	X	Tin	Black	1-1827691-1			

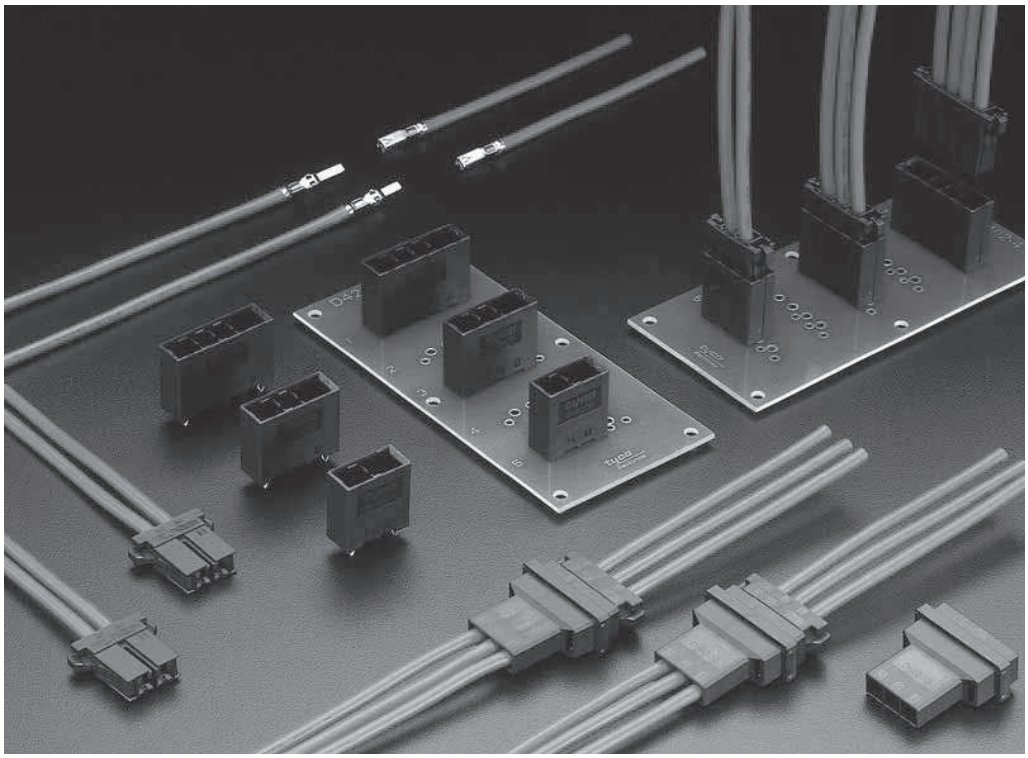
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-4000 Series

Series profile

These 20 amp power line connectors are perfect for industrial machinery. They are available in the right sizes for machinery that needs to be made smaller and with high amperages. They have a new 4-point contact design that maintains hertzian stress and increases contacts. Compared to the Dynamic 3000 series, they support over 50% of the amperage, yet with a mating height increase of 14% to achieve miniaturization. This is an increase in amperage per unit volume of about 32% compared to existing products.



Features

1. Compact high-amperage contacts
They have a new contact design with 4 contacts that maintain hertzian stress and physically increases contacts. This not only increases amperage (maximum 20 A rating), but also boosts reliability.

2. Sequential contacts
Sequential mating is possible so the ground is mated first to alleviate static electric charge. Long tabs were developed for the tab contacts as the way to do sequential connection. Plus, by using these contacts in combination with regular tab contacts you can construct a sequential connection environment.

3. Tines (leads) for high amperage
New V shape tines (leads) were developed for mounting on boards. Even though a lot of on-board connection space is needed, through-holes were made as small as possible to make pattern design easy. (patent pending)

4. Lock feeling
Obvious lock sound and feeling when mating means work can be done without mistakes, such as mismating (half-mating), even if the connection cannot be seen.

5. Keying
The housing is keyed (with a slit), so differentiating between X keys and Y keys prevents mismating.

Dynamic Series Connectors

D-4000 Series Specifications and Standards

Performance Specifications

Item \ Pitch	6.35mm (250mils)
Voltage Rating	600V AC (rms)/DC
Current Rating	2 position : 24A 3 position : 23A 4 position : 22A (when using #12 AWG wire)
Contact Resistance	10mΩ Max. (Final)
Dielectric Withstanding Voltage	2,500V AC (1 minute)
Operating Temperature	−55˚C~+105˚C

Positions/wire size/current rating

Unit: A (ampere)

No. of Pos.	Wire Size (AWG)		
	12	14	16
2	24	21	16
3	23	20	15
4	22	19	14

Specifications and Instruction Sheets

Product Specification		108-78182
Application Specification		114-5369
Hand Tool Instruction Sheets	Hand Tool Part Number: 1762130-1 (M)	411-78174
	Hand Tool Part Number: 1762671-1 (M)★	411-78229
	Hand Tool Part Number: 1762129-1 (L)	411-78173
	Hand Tool Part Number: 1762670-1 (L)★	411-78195
Extraction Tool (Part Number : 176246-1) Instruction Sheet		411-78186

Don't fail to obtain Instruction Sheets when you choose to use these tools.
Orders can be placed through our online catalogs also.
★PEW12

Material and Finish

Description	Material	Finish
Receptacle contact Tab contact	Phosphor bronze or Copper alloy	Gold plated with underplated Nickel (0.38μm)
Tab post	Phosphor bronze or Copper alloy	Tin plated and (Contact area) Gold plated with underplated Nickel
Housing	UL94V-0, Glass filled thermoplastic polyester (PBT)	

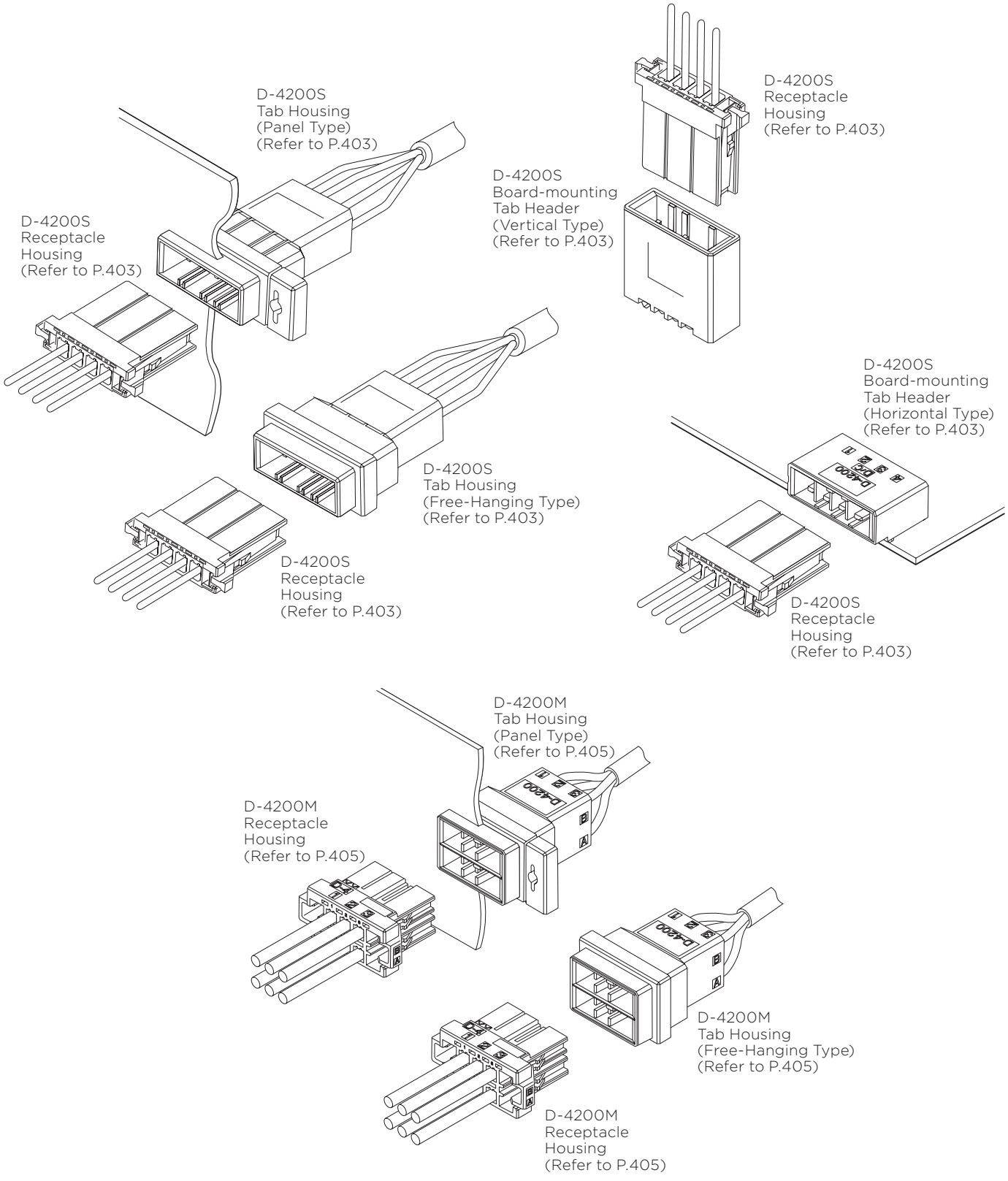
Safety Specifications

The safety specifications listed below are approved on specific part numbers. Contact our Sales Department to check if the part numbers you use are approved or not. Keep in mind that there are instances where values deffer from those given by Product Specification.

Specifications \ Series	D-4200		
	Voltage Rating	Current Rating	Temperature Rating
Product Specification 108-78182	600V AC/DC	24A AWG#12 2 positions in housing	−55˚C~+105˚C
UL File No.E28476	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—
CSA Report No. LR 7189	600V AC/DC	24A	—
TÜV License No. R 50084673	600V AC/DC	AWG / A(2Pos.) 12 / 24 14 / 21 16 / 16	−55˚C~+105˚C

Dynamic Series Connectors

D-4000 Series List of Dynamic Series Products by Application

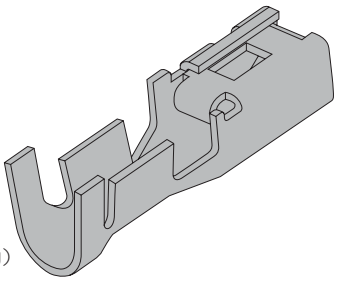


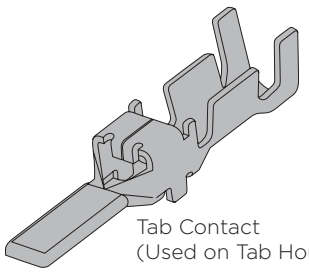
Dynamic Series Connectors

D-4 Contact

■ Crimp Type
(Gold Plated: 0.38μm)

Receptacle Contact
(Used on Receptacle Housing)





Tab Contact
(Used on Tab Housing)

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number				Tool Part Number	
				Receptacle Contact		Tab Contact	Sequetial Long Tab Contact	Mini-Applicator	Hand Tool (Dies Only)
AWG	mm²								
16 14	1.25 2.20	2.0~3.2 2.8~3.75	M	Strip Form	1747418-2	1747419-2	1-1747419-2	1762120-2	—
				Loose Piece	1747499-2	1747501-2	1-1747501-2	—	1762130-1 1762671-1★ (1762675-1)
14 12	2.20 3.50	2.9~3.8 3.8~4.2	L	Strip Form	1747415-2	1747416-2	1-1747416-2	1762119-2	—
				Loose Piece	1747498-2	1747500-2	1-1747500-2	—	1762129-1 1762670-1★ (1762674-1)

Note
- Minimum order quantity is provided for each product. When ordering, specify your recequirments by multiplying the quantity set for each.
- Mini-Applicator is for use on Automachine. Refer to P.437
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

★ PEW12

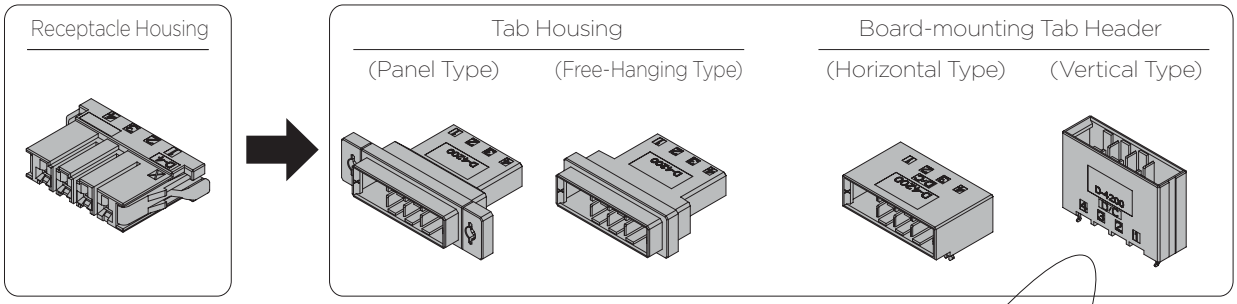
The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings. See from page 437 for details on applicable tools.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-4200S — High-Current 1 Row Type

Part Number Chart



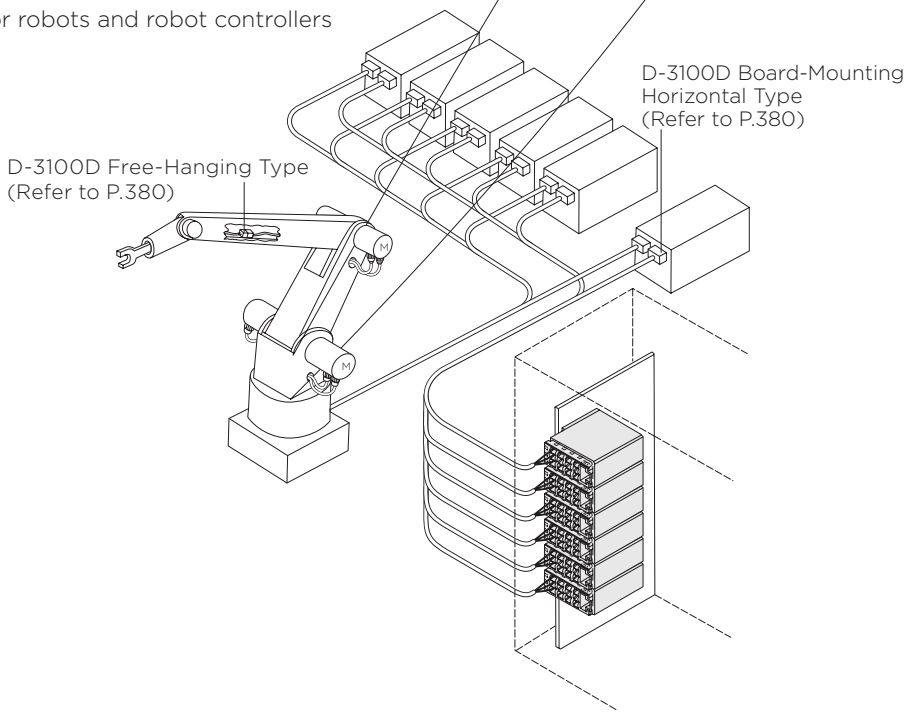
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header			
							Horizontal Type		Vertical Type	
					Panel Type	Free-Hanging Type	Standard Type	Sequential Type	Standard Type	Sequential Type
2	Black	X	1-1747276-2	Gold	1-1747535-2	1-1747414-2	1-1903328-2	—	1-1747277-2	—
	Black	Y	2-1747276-2	Gold	2-1747535-2	2-1747414-2	2-1903328-2	—	2-1747277-2	—
3	Black	X	1-1747276-3	Gold	1-1747535-3	1-1747414-3	1-1903328-3	5-1903328-3	1-1747277-3	5-1747277-3
	Black	Y	2-1747276-3	Gold	2-1747535-3	2-1747414-3	2-1903328-3	6-1903328-3	2-1747277-3	6-1747277-3
4	Black	X	1-1747276-4	Gold	1-1747535-4	1-1747414-4	1-1903328-4	5-1903328-4	1-1747277-4	5-1747277-4
	Black	Y	2-1747276-4	Gold	2-1747535-4	2-1747414-4	2-1903328-4	6-1903328-4	2-1747277-4	6-1747277-4

Information about related products

Applicable Contact ..... Refer to P.402
Performance Specifications ... Refer to P.400

Application

Example of application for robots and robot controllers

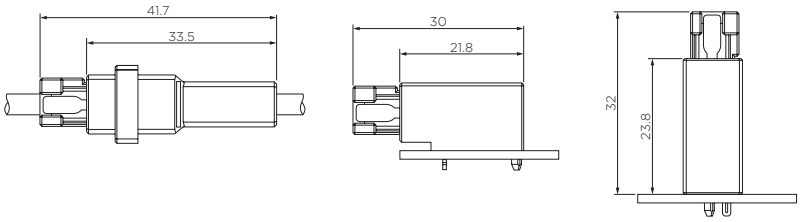


Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

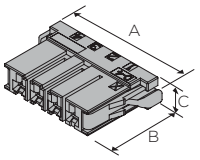
D-4200S — High-Current 1 Row Type

Mating Dimensions



Dimensions

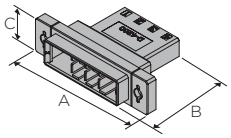
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747276-2	27.4	23.0	8.5
	Y	—	Black	2-1747276-2			
3	X	—	Black	1-1747276-3	33.7	23.0	8.5
	Y	—	Black	2-1747276-3			
4	X	—	Black	1-1747276-4	40.1	23.0	8.5
	Y	—	Black	2-1747276-4			

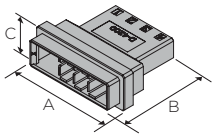
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747535-2	40.0	33.5	13.8
	Y	—	Black	2-1747535-2			
3	X	—	Black	1-1747535-3	46.0	33.5	13.8
	Y	—	Black	2-1747535-3			
4	X	—	Black	1-1747535-4	53.0	33.5	13.8
	Y	—	Black	2-1747535-4			

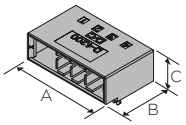
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-1747414-2	26.4	33.5	13.8
	Y	—	Black	2-1747414-2			
3	X	—	Black	1-1747414-3	32.7	33.5	13.8
	Y	—	Black	2-1747414-3			
4	X	—	Black	1-1747414-4	39.1	33.5	13.8
	Y	—	Black	2-1747414-4			

■ Board-mounting Tab Header

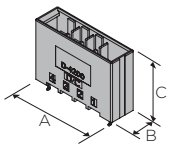
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-1903328-2	22.4	21.8	11.9
	Y	Gold	Black	2-1903328-2			
3	X	Gold	Black	1-1903328-3	28.7	21.8	11.9
	Y	Gold	Black	2-1903328-3			
	X	Gold	Black	5-1903328-3∗1			
	Y	Gold	Black	6-1903328-3∗1			
4	X	Gold	Black	1-1903328-4	35.1	21.8	11.9
	Y	Gold	Black	2-1903328-4			
	X	Gold	Black	5-1903328-4∗1			
	Y	Gold	Black	6-1903328-4∗1			

∗1 Sequential Type

Vertical Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-1747277-2	22.4	10.4	23.8
	Y	Gold	Black	2-1747277-2			
3	X	Gold	Black	1-1747277-3	28.7	10.4	23.8
	Y	Gold	Black	2-1747277-3			
	X	Gold	Black	5-1747277-3∗1			
	Y	Gold	Black	6-1747277-3∗1			
4	X	Gold	Black	1-1747277-4	35.1	10.4	23.8
	Y	Gold	Black	2-1747277-4			
	X	Gold	Black	5-1747277-4∗1			
	Y	Gold	Black	6-1747277-4∗1			

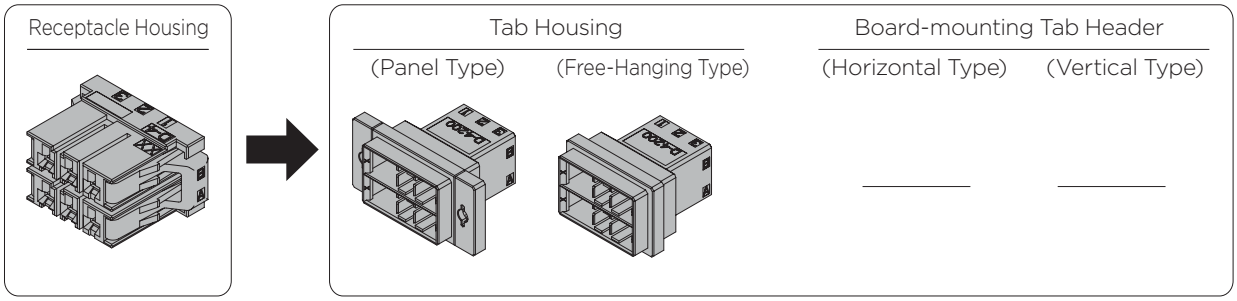
∗1 Sequential Type

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-4200M — High-Current Modular 2 Row Type

Part Number Chart

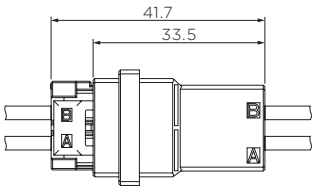


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
6	Black	XX	1-1903329-3	—	1-1903331-3	1-1903330-3	—	—
	Black	YY	2-1903329-3	—	2-1903331-3	2-1903330-3	—	—
	Black	XY	3-1903329-3	—	3-1903331-3	3-1903330-3	—	—

Information about related products

Applicable Contact ..... Refer to P.402
Performance Specifications ... Refer to P.400

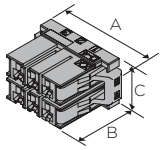
Mating Dimensions



Panel/Free-Hanging Type

Dimensions

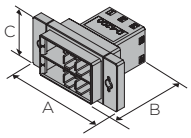
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903329-3	33.7	23.0	17.3
	YY	—	Black	2-1903329-3			
	XY	—	Black	3-1903329-3			

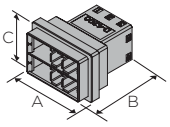
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903331-3	46.0	33.5	22.6
	YY	—	Black	2-1903331-3			
	XY	—	Black	3-1903331-3			

Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
6	XX	—	Black	1-1903330-3	32.7	33.5	22.6
	YY	—	Black	2-1903330-3			
	XY	—	Black	3-1903330-3			

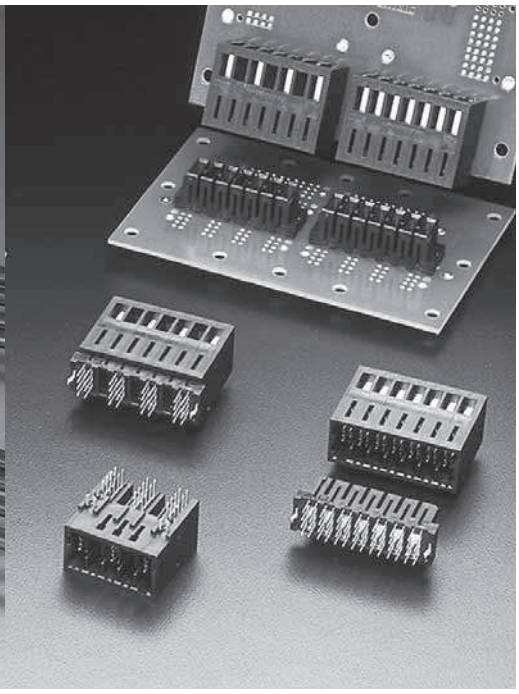
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5000 Series

Series profile

The Dynamic 5000 series was developed for up to 45 amperes in response to the demand for improved reliability and productivity for the main power lines in equipment.
They can be used for a variety of applications as replacements for terminal blocks, or round terminals. They keep the contact concept and track record built up by the Dynamic series, and are compact with high amperage capabilities. Plus, they have excellent low insertion and extraction force with high reliability.
From PCBs to internal wiring, any situation can be handled with the same series, and there is a wide variety of housings available.
The D-5000 series proposes assured connections without requiring skilled workers, even for high-amperage power lines.



Features

1. High-amperage contacts
The D-5000 series uses a pinch-resistant box type contact concept, which has the tradition and track record of the Dynamic series. The receptacle contacts are reliabile providing both superior flexure and conductivity by using a newly developed copper alloy, the same as the D-3000 series. Plus, we have added a silver plated type to the D-5000α series to cover even more of the high-amperage area. You can select contacts to match your application.

2. Sequential contacts
Sequential mating is possible so the ground is mated first to alleviate static charge. Long tabs were developed for the tab contacts as the way to do sequential connection. Plus, by using these contacts in combination with regular tab contacts you can construct a sequential connection environment.

3. Tines (leads) for high amperage
The tines (leads) for on-board mounting are a newly developed twin-lead type. It is possible to reliably join patterns and connectors because a wide area of PCBs can be allocated.

4. IP20 (prevents finger contact)
We propose the D-5300 reverse mount type for applications that have parts with live current on the equipment. Connectors on the equipment (panel side) satisfy IP-20 standards with a housing that covers the receptacal contact on the equipment.

Dynamic Series Connectors

D-5000 Series Specifications and Standards

Performance Specifications

Item	D-5200	D-5300	D-5200α
Pitch	400mils (10.16mm)		
Current Rating	30A Max.		45A Max.
Voltage Rating	630V AC/DC		
Dielectric Withstanding Voltage	3,000V AC (1 minute)		
Contact Resistance	2mΩ Max.		
Insertion Force	9.8 N Max. (per position)		
Extraction Force	1.96 N Min. (per position)		
Durability	50 Cycles (0.76 μm gold)		
Housing Lock Strength	98 N Min		

Positions/wire size/current rating

Unit: A (ampere)

No. of Pos.	Series	Wire Size (AWG)						
		20	18	16	14	12	10	8
6	D-5200	—	—	16	19	25	30	—
4	D-5300							
3	D-5200α	12	16	20	25	33	38	45
4		12	15	18	23	31	35	43

Specifications and Instruction Sheets

Product Specification		108-5453
Test Report		501-5188
Application Specification		114-5206
Hand Tool Instruction Sheets	Hand Tool Part Number: 234170-1	411-5712
	Hand Tool Part Number: 234171-1	411-5713
	Hand Tool Part Number: 91596-1	408-8547-1
	Hand Tool Part Number: 1366044-1	411-5976
Extraction Tool (Part Number : 409158-1) Instruction Sheet		411-5774

Don't fail to obtain Instruction Sheets and other appropriate papers when you adopt our products.
Orders can be placed through our online catalogs also.

Material and Finish

Description	Item	D-5200	D-5300	D-5200α
Contact	Material	Copper alloy		
	Finish	Gold plated with under-plated Nickel	Gold/Silver plated with un-derplated Nickel	Silver plated with under-plated Nickel
Tab Post	Material	Copper alloy	—	Copper alloy
	Finish	Gold plated with under-plated Nickel	—	Silver plated with under-plated Nickel
Housing	Material	UL 94V-0, Glass filled thermoplastic polyester (PBT)		

Safety Specifications

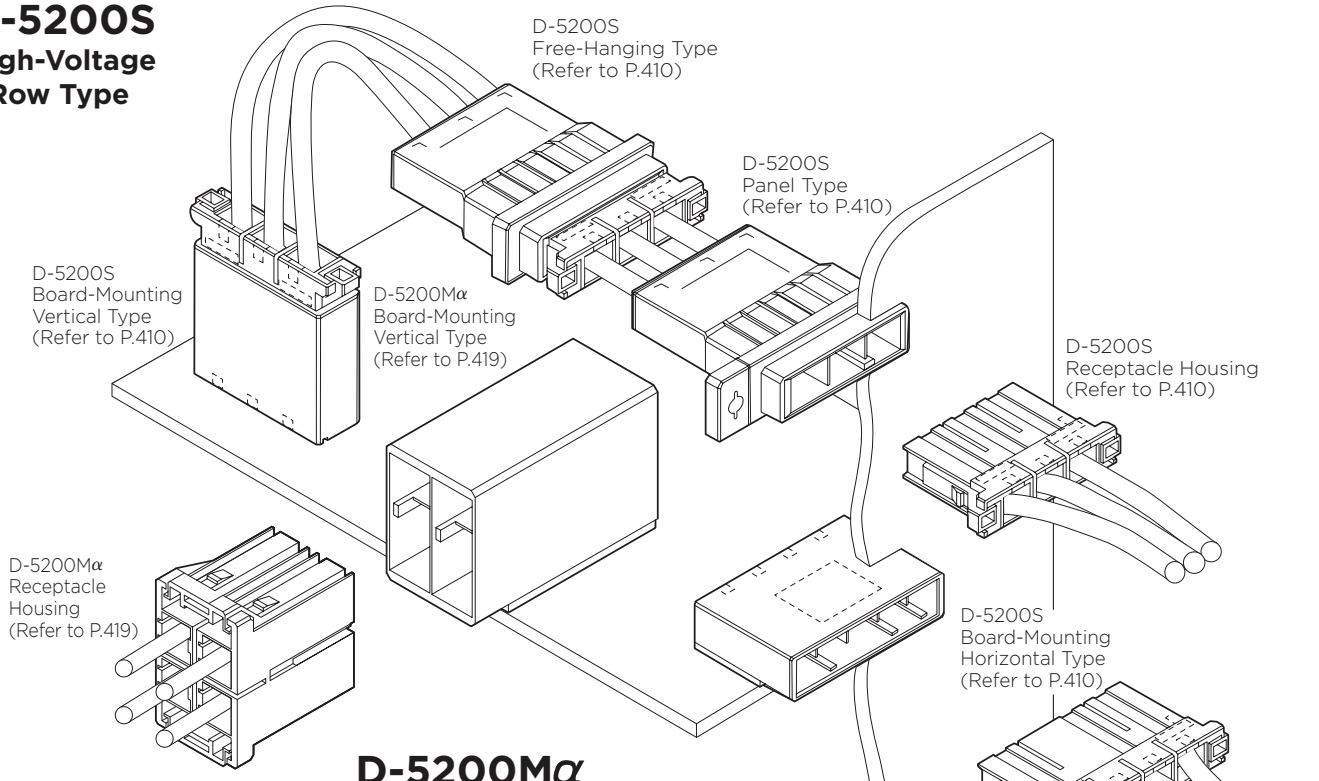
The following safety specifications are applicable to specific Part Numbers.
Contact us to check if approval is given to each of Part Numbers you are using. Note that there are instances where values differ from those given in Product Specification.

Series / Specifications	D-5200 Series (400 mil, 10.16mm pitch)			D-5200Mα Series		
	Voltage Rating	Current Rating	Temperature Rating	Voltage Rating	Current Rating	Temperature Rating
Product Specification 108-5453	630V AC/DC	See the preceding page	−55˚C~+105˚C	—	See the preceding page	−55˚C~+105˚C
UL File No.E28476 (Recognized Component)	Determined by requirements of equipment in use.	Determined by requirements of equipment in use.	—	—	Determined by requirements of equipment in use.	—
CSA Report No. LR 7189	600V AC/DC	AWG / A: 16 / 13; 14 / 18; 12 / 25; 10 / 30	—	—	—	—
TÜV License No. R9650368 IP Protection IP-10 Overvoltage Classification (Ⅱ) Number of repeated insertions and with-drawals allowed : 50 times.	600V AC/DC	AWG / A: 16 / 15; 14 / 20; 12 / 25; 10 / 30	−30˚C~+105˚C	—	AWG / A (1-3Pos. / 4Pos.): 20 / 12.5 / 12.5; 18 / 17.5 / 16; 16 / 21 / 19.5; 14 / 26 / 24; 12 / 33 / 31; 10 / 40 / 37.5; 8 / 48 / 46	−30˚C~+105˚C

Dynamic Series Connectors

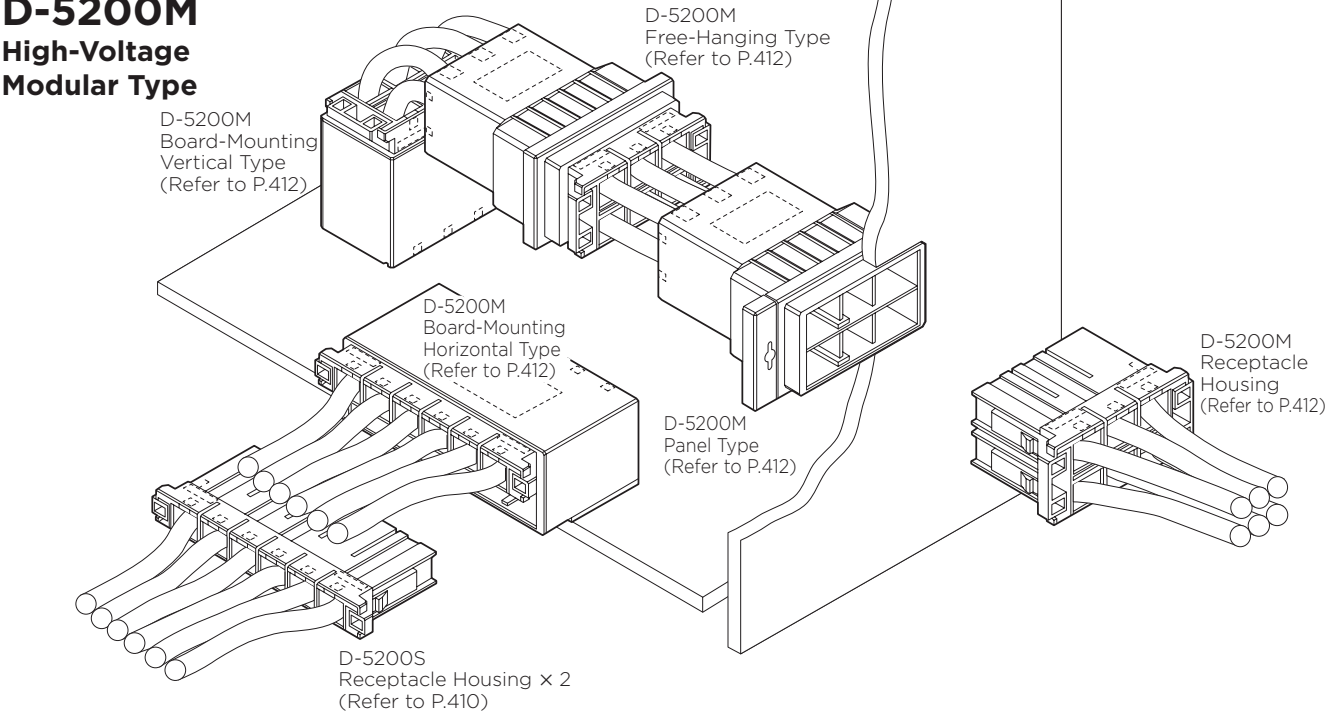
D-5000 Series List of Dynamic Series Products by Application

D-5200S
High-Voltage
1 Row Type



D-5200Mα
High-Current
Modular Type

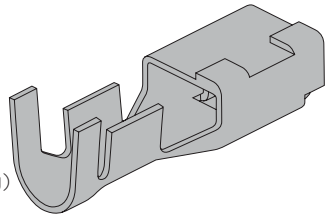
D-5200M
High-Voltage
Modular Type



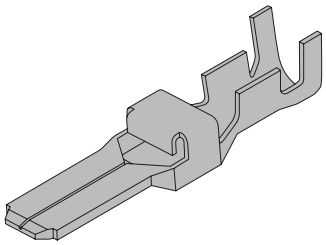
Dynamic Series Connectors

D-5 Contact

■ Crimp Type



Receptacle Contact
(Used on Receptacle Housing)



Tab Contact
(Used on Tab Housing)

● D-5 Series Contact : Gold Plated/Silver Plated Type

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number				Tool Part Number	
AWG	mm²			Receptacle Contact		Tab Contact	Sequetial Tab Contact	Mini-Applicator	Hand Tool
20	0.50	1.8~2.83	SS	Strip Form	1318985-2 1318985-3 1318985-6	—	—	1528106-2	—
16	1.25	2.3~3.23		Loose Piece	1318986-2 1318986-3 1318986-6	—	—	—	91596-1
16	1.25	3~3.8	S	Strip Form	179955-2 179955-3	917802-2 917802-3	84696-1	1366659-2	—
14	2.20			Loose Piece	316040-2 316040-3 316040-6	917804-2 917804-3 917804-6	2013594-1	—	234170-1
12	3.50	4~5.2	M	Strip Form	179956-2 179956-3	917803-2 917803-3	84695-1	1366660-2	—
10	5.50			Loose Piece	316041-2 316041-3 316041-6	917805-2 917805-3 917805-6	2013593-1	—	234171-1
8	8.00	4.9~7.8	L	Strip Form	1318696-2	—	—	1366658-3	—
				Loose Piece	1318697-2	1747443-6	—	—	1366044-1

Note : • The part number suffix is the code for plating.
-1: 0.2 μm thick gold plaed
-2: 0.38 μm thick gold plated
-3: 0.76 μm thick gold plated
-6: 2.54 μm thick silver plated

• Minimum order quantity is provided for each product. When ordering, specify your requirments by multiplying the quantity set for each.
• Mini-Applicator is for use on Automachine. Refer to P.437
• Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

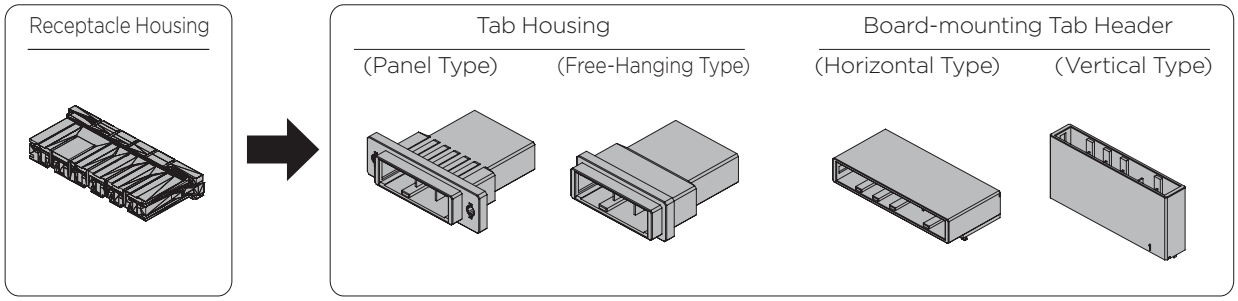
The receptacle contacts can be used with all receptacle housings, and tab contacts can be used with all tab housings.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200S — High-Current 1 Row Type

Part Number Chart

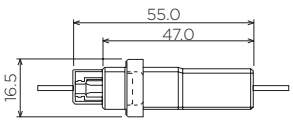


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header			
							Horizontal Type		Vertical Type	
					Panel Type	Free-Hanging Type	Standard Type	Sequential Type	Standard Type	Sequential Type
2	Black	X	1-179958-2	Gold	1-353047-2	1-353046-2	1-353079-2	—	1-353080-2	—
	Black			Gold			1-353079-3	—	1-353080-3	—
	Black			Gold	2-353047-2	2-353046-2	—	—	6-353080-2	—
	Black	Y	2-179958-2	Gold				—	2-353080-2	—
	Black			Gold				—	2-353080-3	—
3	Black	X	1-179958-3	Gold	1-353047-3	1-353046-3	1-353081-2	8-353081-2	1-353082-2	8-353082-2
	Black			Gold			1-353081-3	—	1-353082-3	—
	Black			Gold	2-353047-3	2-353046-3	2-353081-2	—	6-353082-2	—
	Black	Y	2-179958-3	Gold			2-353081-3	—	2-353082-2	—
	Black			Gold			—	—	2-353082-3	—
4	Black	X	1-179958-4	Gold	(Use D-5200M with 2-row and 4 or 6 positions on page 419.)		1-917541-2	8-917541-2	1-917542-2	8-917542-2
	Black			Gold			1-917541-3	—	1-917542-3	
	Black	Y	2-179958-4	Gold			2-917541-2	—	2-917542-2	—
	Black			Gold			—	—	2-917542-3	—
6	Black	X	1-179958-6	Gold			1-179959-2	—	1-179960-2	—
	Black			Gold			1-179959-3	—	1-179960-3	—
	Black			Gold			—	—	6-179960-2	—
	Black	Y	2-179958-6	Gold				—	2-179960-2	—
	Black			Gold				—	2-179960-3	—
	Black			Gold				—	7-179960-2	—

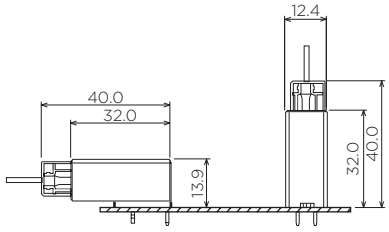
Information about related products

Applicable Contact ..... Refer to P.409
Performance Specifications ... Refer to P.407

Mating Dimensions



Panel/Free-Hanging Type



Horizontal/Vertical Type

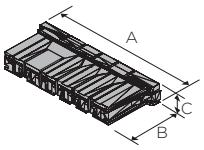
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200S — High-Current 1 Row Type

Dimensions

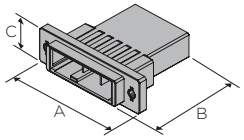
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179958-2	35.8	29.0	9.8
	Y	—	Black	2-179958-2			
3	X	—	Black	1-179958-3	46.0	29.0	9.8
	Y	—	Black	2-179958-3			
4	X	—	Black	1-179958-4	53.7	29.0	9.8
	Y	—	Black	2-179958-4			
6	X	—	Black	1-179958-6	74.0	29.0	9.8
	Y	—	Black	2-179958-6			

■ Tab Housing

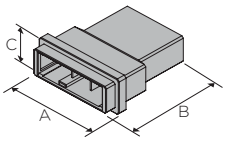
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-353047-2	47.0	47.0	16.5
	Y	—	Black	2-353047-2			
3	X	—	Black	1-353047-3	57.0	47.0	16.5
	Y	—	Black	2-353047-3			

■ Tab Housing

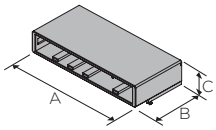
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-353046-2	33.4	47.0	16.5
	Y	—	Black	2-353046-2			
3	X	—	Black	1-353046-3	43.6	47.0	16.5
	Y	—	Black	2-353046-3			

■ Board-mounting Tab Header

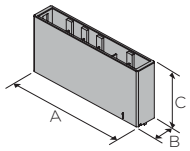
Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-353079-2	29.4	32.0	13.9
		Gold	Black	1-353079-3			
3	X	Gold	Black	1-353081-2	39.5	32.0	13.9
		Gold	Black	8-353081-2			
		Gold	Black	1-353081-3			
	Y	Gold	Black	2-353081-2			
		Gold	Black	2-353081-3			
4	X	Gold	Black	1-917541-2	49.7	32.0	13.9
		Gold	Black	8-917541-2			
		Gold	Black	1-917541-3			
	Y	Gold	Black	2-917541-2			
6	X	Gold	Black	1-179959-2	70.0	32.0	13.9
		Gold	Black	1-179959-3			

■ Board-mounting Tab Header

Vertical Type



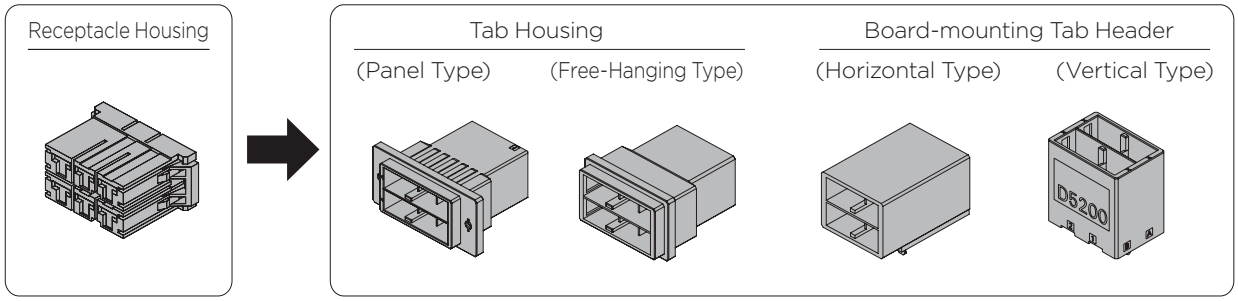
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	Gold	Black	1-353080-2	29.4	12.4	32.0
		Gold	Black	1-353080-3			
		Gold	Black	6-353080-2			
	Y	Gold	Black	2-353080-2			
		Gold	Black	2-353080-3			
3	X	Gold	Black	1-353082-2	39.5	12.4	32.0
		Gold	Black	8-353082-2			
		Gold	Black	1-353082-3			
		Gold	Black	6-353082-2			
	Y	Gold	Black	2-353082-2			
		Gold	Black	2-353082-3			
4	X	Gold	Black	1-917542-2	49.7	12.4	32.0
		Gold	Black	8-917542-2			
		Gold	Black	1-917542-3			
	Y	Gold	Black	2-917542-2			
		Gold	Black	2-917542-3			
6	X	Gold	Black	1-179960-2	70.0	12.4	32.0
		Gold	Black	1-179960-3			
		Gold	Black	6-179960-2			
	Y	Gold	Black	2-179960-2			
		Gold	Black	2-179960-3			
		Gold	Black	7-179960-2			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200M —— High-Current Modular 2 Row Type

Part Number Chart



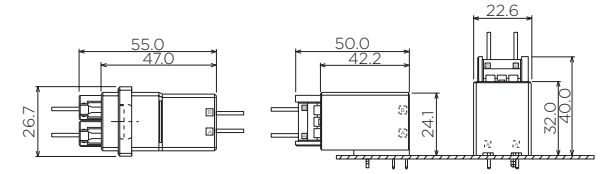
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header			
							Horizontal Type		Vertical Type	
					Panel Type	Free-Hanging Type	Standard Type	Sequential Type	Standard Type	Sequential Type
4	Black	XX	1-917807-2	Gold/Silver	1-917809-2	1-917808-2	1-1123309-2	8-1123309-2	1-1981458-6	——
	Black	YY	2-917807-2	Gold/Silver	2-917809-2	2-917808-2	2-1123309-2	——	2-1981458-6	——
	Black	XY	3-917807-2	Gold/Silver	3-917809-2	3-917808-2	3-1123309-2	——	3-1981458-6	——
6	Black	XX	1-917807-3	—	1-917809-3	1-917808-3	——	——	——	——
	Black	YY	2-917807-3	—	2-917809-3	2-917808-3	——	——	——	——
	Black	XY	3-917807-3	—	3-917809-3	3-917808-3	——	——	——	——
8	Black	XX	—— *1	Gold	——	——	1123829-1	——	——	——
	Black	YY	——	—	——	——	——	——	——	——
	Black	XY	——	—	——	——	——	——	——	——

*1: Use two 1-179958-4

Information about related products

Applicable Contact ..... Refer to P.409
Performance Specifications ... Refer to P.407

Mating Dimensions



Panel/Free-Hanging Type Horizontal Type Vertical Type

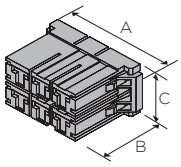
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200M — High-Current Modular 2 Row Type

Dimensions

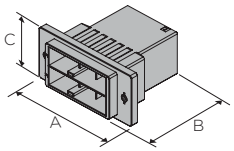
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917807-2	33.4	29.0	20.0
	YY	—	Black	2-917807-2			
	XY	—	Black	3-917807-2			
6	XX	—	Black	1-917807-3	43.5	29.0	20.0
	YY	—	Black	2-917807-3			
	XY	—	Black	3-917807-3			

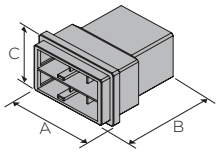
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917809-2	47.0	47.0	26.7
	YY	—	Black	2-917809-2			
	XY	—	Black	3-917809-2			
6	XX	—	Black	1-917809-3	57.0	47.0	26.7
	YY	—	Black	2-917809-3			
	XY	—	Black	3-917809-3			

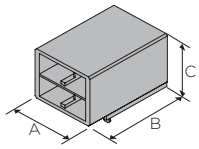
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	—	Black	1-917808-2	33.4	47.0	26.7
	YY	—	Black	2-917808-2			
	XY	—	Black	3-917808-2			
6	XX	—	Black	1-917808-3	43.6	47.0	26.7
	YY	—	Black	2-917808-3			
	XY	—	Black	3-917808-3			

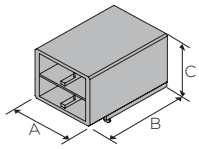
■ Board-mounting Tab Header

Horizontal Type



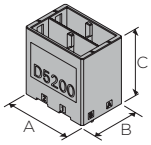
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Gold	Black	1-1123309-2	29.4	42.2	24.1
	YY	Gold	Black	2-1123309-2			
	XY	Gold	Black	3-1123309-2			
8	XX	Gold	Black	1123829-1	49.7	32.0	26.3

Sequential Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Gold	Black	8-1123309-2	29.4	42.2	24.1

Vertical Type



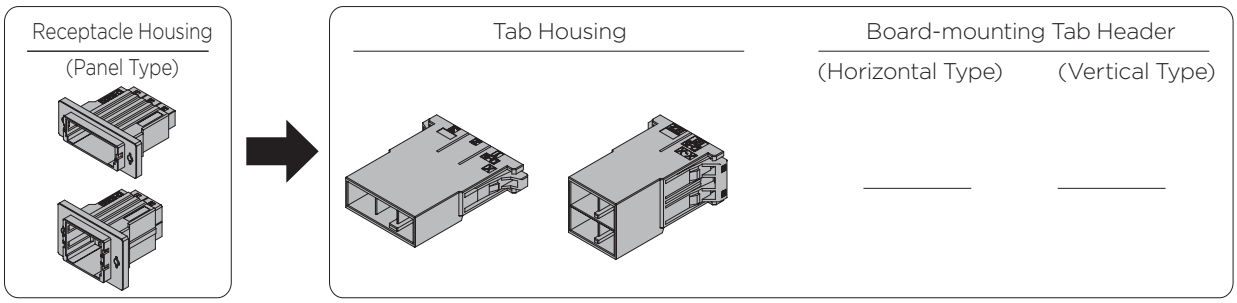
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Silver	Black	1-1981458-6	29.4	22.6	32.0
	YY	Silver	Black	2-1981458-6			
	XY	Silver	Black	3-1981458-6			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5300 Series Reverse Mount Type

Part Number Chart

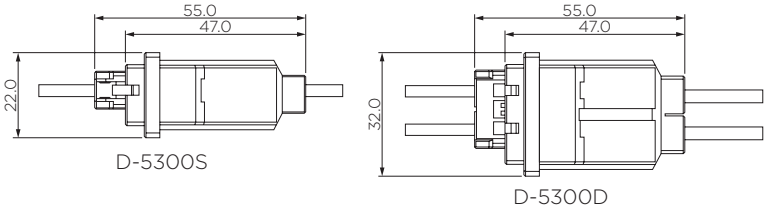


No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing	Board-mounting Tab Header	
			Panel Type			Horizontal Type	Vertical Type
3	Black	X	1-1747821-3	—	1-1747819-3	—	—
	Black	Y	2-1747821-3	—	2-1747819-3	—	—
4	Black	XX	1-1747822-2	—	1-1747820-2	—	—
	Black	YY	2-1747822-2	—	2-1747820-2	—	—
	Black	XY	3-1747822-2	—	3-1747820-2	—	—

Information about related products

Applicable Contact ..... Refer to P.409
Performance Specifications ... Refer to P.407

Mating Dimensions

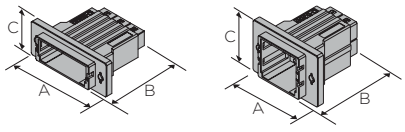


Panel Mount Type

Dimensions

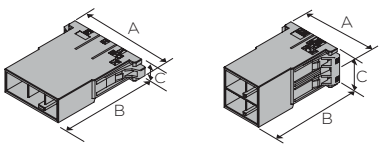
■ Receptacle Housing

Panel Mount Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1747821-3	57.0	47.0	22.0
	Y	—	Black	2-1747821-3			
4	XX	—	Black	1-1747822-2	47.0	47.0	32.0
	YY	—	Black	2-1747822-2			
	XY	—	Black	3-1747822-2			

■ Tab Housing



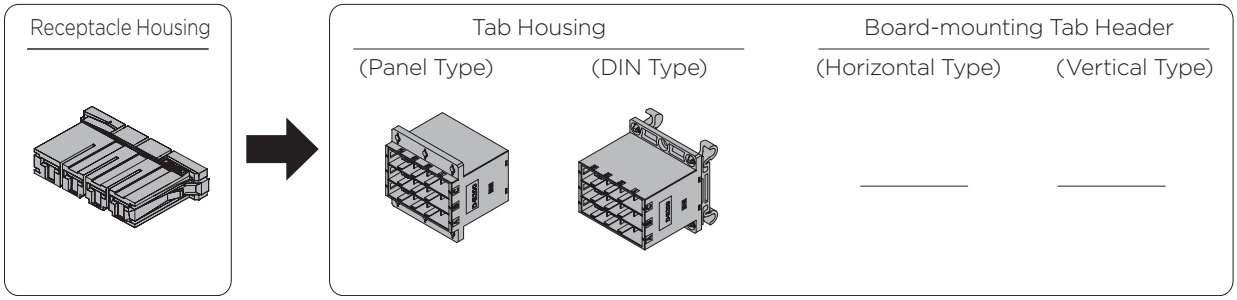
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-1747819-3	46.5	47.0	12.5
	Y	—	Black	2-1747819-3			
4	XX	—	Black	1-1747820-2	33.8	47.0	22.6
	YY	—	Black	2-1747820-2			
	XY	—	Black	3-1747820-2			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200 Series Dynatap 12P (4P x 3 Row)

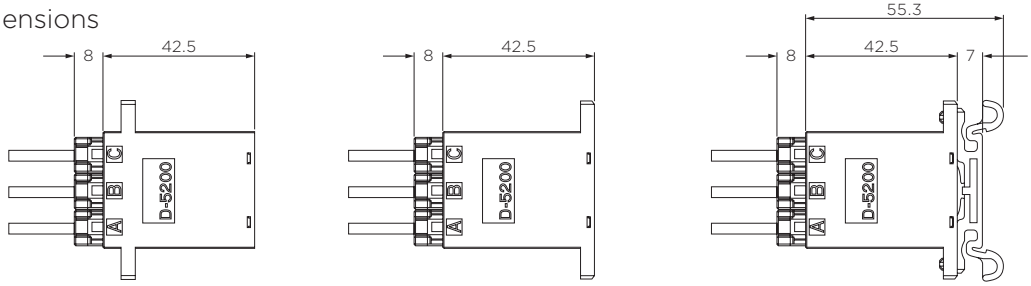
Part Number Chart



No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	DIN Type	Horizontal Type	Vertical Type
4	Black	—	1-179958-4	—	—	—	—	—
12	Black	—	—	Gold	1903146-1✻1	1903146-3	—	—
12	Black	—	—	Gold	1903146-2✻2	1-1903146-3	—	—
20	Black	—	—	Gold	2013285-1	—	—	—
	Black	—	—	Gold	2013285-2✻2	2013285-3	—	—

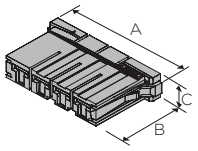
✻1: Front panel type ✻2 Bottom type

Mating Dimensions



Mating parts

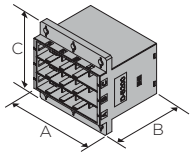
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1-179958-4	53.7	29.0	9.8

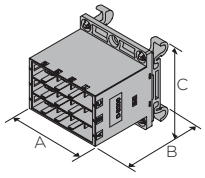
■ Tab Housing

Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	1903146-1	49.7	42.5	50.0
	—	Gold	Black	1903146-2			
20	—	Gold	Black	2013285-1	50.5	42.5	76.4
	—	Gold	Black	2013285-2			

DIN Type



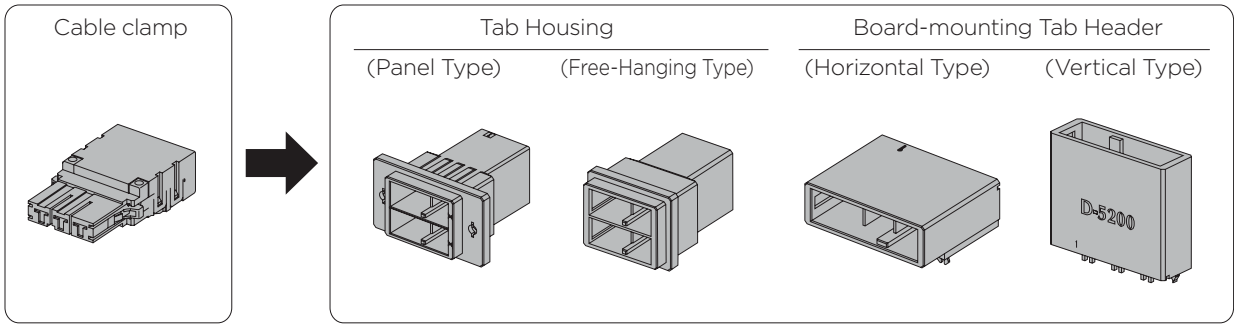
No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	Gold	Black	1903146-3	49.7	55.3	50.0
	—	Gold	Black	1-1903146-3			
20	—	Gold	Black	2013285-3	53.0	55.3	76.4

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

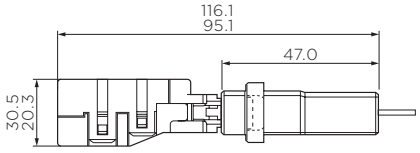
Dyna-Clamp Kit — Cable clamp kit

Part Number Chart

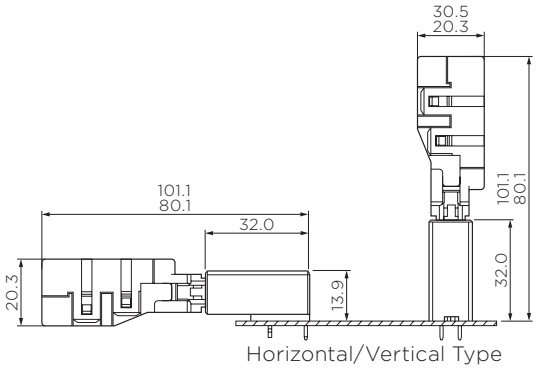


No. of Pos.	Keying	Cable clamp	Tab Housing		Board-mounting Tab Header	
			Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
3	—	1473668-1	1-353047-3	1-353046-3	1-353081-2	1-353082-2
					1-353081-3	1-353082-3

Mating Dimensions



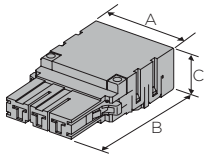
Panel/Free-Hanging Type



Horizontal/Vertical Type

Dimensions

■ Cable clamp



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	—	Black	1473668-1	40.3	69.3	20.3

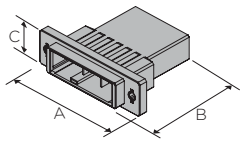
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

Dyna-Clamp Kit — Cable clamp kit

■ Tab Housing

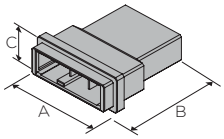
Panel Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-353047-3	57.0	47.0	12.1

■ Tab Housing

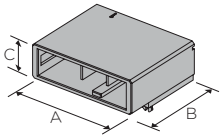
Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	—	Black	1-353046-3	43.6	47.0	12.1

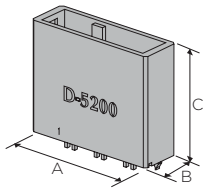
■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Blac	k1 -353081-2	39.5	32.0	13.9
		Gold	Black	1-353081-3			

Vertical Type

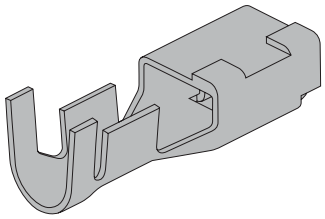


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	X	Gold	Black	1-353082-2	39.5	12.4	32.0
		Gold	Black	1-353082-3			

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5α Series Contact



● D-5α Series Contact : Silver Plated Type

Applicable Wire		Wire Ins. Diameter mm	Wire Range Mark	Contact Part Number		Tool Part Number	
				Receptacle Contact		Mini-Applicator	Hand Tool
AWG	mm^2						
20	0.50	1.8~2.83	SS	Strip Form	1318985-6	1366757-2	—
16	1.25	2.35~3.23		Loose Piece	1318986-6	—	91596-1
16	1.25	3~3.80	S	Strip Form	179955-6	1366659-2	—
14	2.20			Loose Piece	316040-6	—	234170-1
12	3.50	4~5.2	M	Strip Form	179956-6	1366660-2	—
10	5.50			Loose Piece	316041-6	—	234171-1
8	8.00	4.9~7.8	L	Strip Form	1318696-6	1366658-3	—
				Loose Piece	1318697-6	—	1366044-1

Note : The contacts part numbered with "-6" are Silver plated with 2.54μm thickness.
- Minimum order quantity is provided for each product. When ordering, specify your requirments by multiplying the quantity set for each.
- Mini-Applicator is for use on Automachine. Refer to P.437
- Strip Form contacts are used with Mini-Applicator and Loose-Piece contacts are with hand tools.

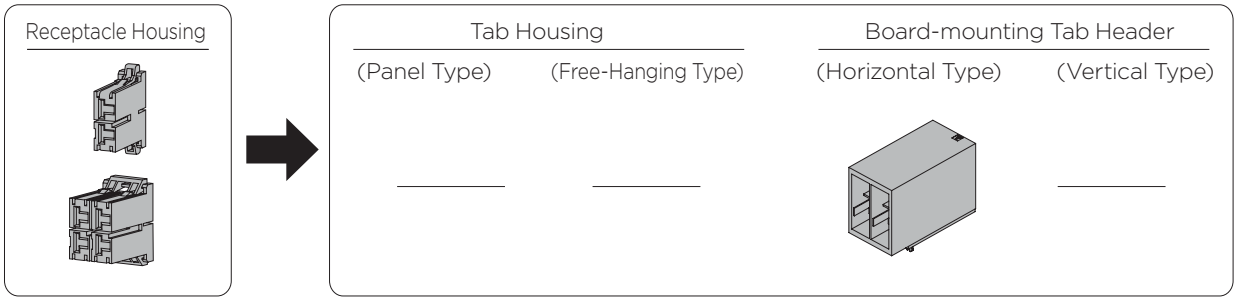
Receptacle contacts can be used in all receptacle housings.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

D-5200Mα — High-Current/High-Voltage Modular Type 2 Row Type

Part Number Chart



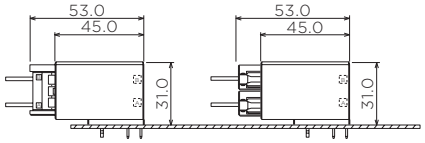
No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing		Board-mounting Tab Header	
					Panel Type	Free-Hanging Type	Horizontal Type	Vertical Type
2	Black	X	1-179958-2	—	—	—	—	—
	Black	Y	2-179958-2	—	—	—	—	—
4	Black	XX	1-917807-2	Silver	—	—	1-1318983-6	—
	Black	YY	2-917807-2	Silver	—	—	2-1318983-6	—
	Black	XY	3-917807-2	Silver	—	—	3-1318983-6	—

Note: The 2 pos. receptacles use same 2 pos. housing of D-5200S series. The 4 pos. receptacles use same 4 pos. housing of D-5200M series. The contacts, however, are D-5 (Silver plated type).

Information about related products

Applicable Contact ..... Refer to P.418
Performance Specifications ... Refer to P.407

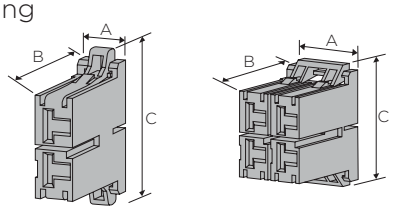
Mating Dimensions



Horizontal Type (Modular Use)

Dimensions

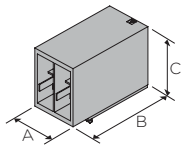
■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	X	—	Black	1-179958-2	9.8	29.0	23.8
	Y	—	Black	2-179958-2			
4	XX	—	Black	1-917807-2	20.0	29.0	33.4
	YY	—	Black	2-917807-2			
	XY	—	Black	3-917807-2			

■ Board-mounting Tab Header

Horizontal Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	XX	Silver	Black	1-1318983-6	22.6	45.0	30.9
	YY	Silver	Black	2-1318983-6			
	XY	Silver	Black	3-1318983-6			

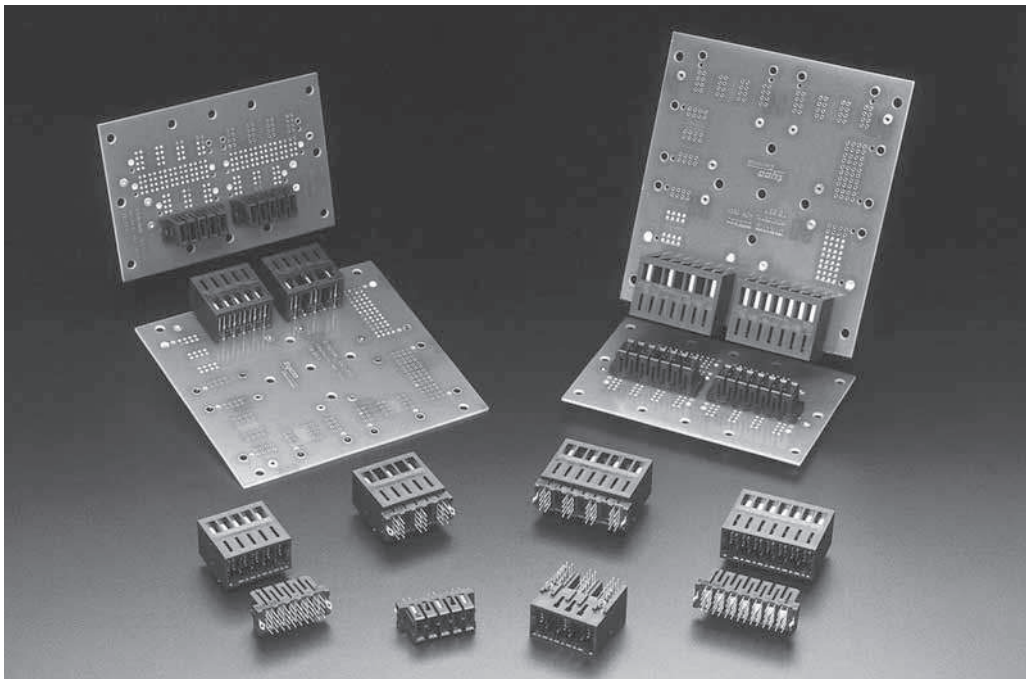
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

DZ-5200

Useful for enabling cableless control board. High-current board to board connectors with 30A per contact

- Equipped with retention leg to protect board from load
- Space allocated to prevent twisting the contact
- Stacking and side-by-side connection types scheduled to enter lineup
- Circuit numbers are easy to identify even for board connectors
- Keying function so you can handle multiple items flexibily
- Soldering is possible without masking
- Scheduled to acquire UL, CSA and TÜV compliance



Performance Specifications

Item \ Pitch	200 mils/400 mils 5.08mm/10.16mm
Voltage Rating	5.08mm pitch: 250V AC (rms)/DC 10.16mm pitch: 600V AC(rms)/DC
Current Rating	5.08mm pitch: 20A 10.16mm pitch: 30A
Contact Resistance	2mΩ Max.
Dielectric Withstanding Voltage	5.08mm pitch: 2,200V AC (1 minute) 10.16mm pitch: 4,000V AC (1 minute)
Operating Temperature	−55˚C~+105˚C
Product Specification	108-78186

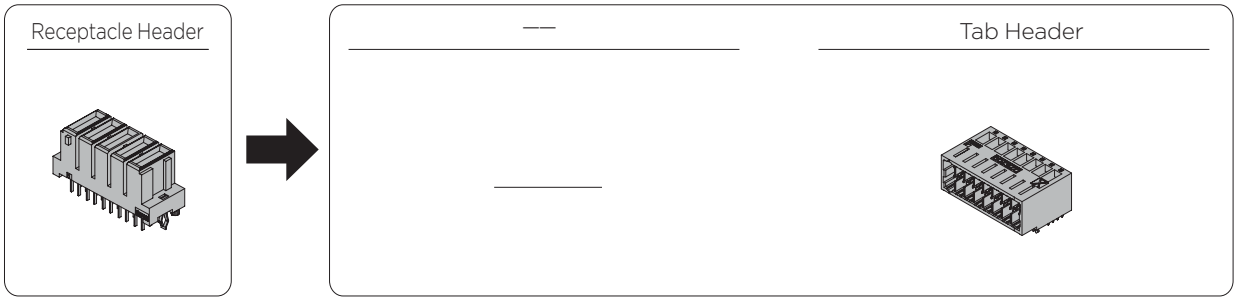
Material and Finish

Description	Material	Finish
Receptacle contact Tab contact	Phosphor bronze or Copper alloy	Gold plated with underplated Nickel
Tab post	Copper alloy	Tin plated and Gold plated with underplated Nickel
Housing	UL94V-0, Glass filled thermoplastic polyester (PBT)	

Dynamic Series Connectors

DZ-5200

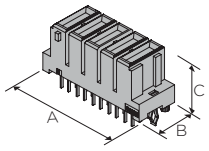
Part Number Chart



No. of Pos.	Color	Keying	Receptacle Header	Plating	——	Tab Header
3	Black	—	5-1747147-3	Gold	——	5-1747145-3
4	Black	—	5-1747147-4	Gold	——	5-1747145-4
5	Black	—	1-1747147-5	Gold	——	1-1747145-5
7	Black	—	1-1747147-7	Gold	——	1-1747145-7

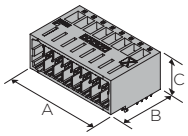
Dimensions

■ Receptacle Header



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	Gold	Black	5-1747147-3	30.8	11.5	14.0
4	—	Gold	Black	5-1747147-4	40.9	11.5	14.0
5	—	Gold	Black	1-1747147-5	30.8	11.5	14.0
7	—	Gold	Black	1-1747147-7	40.9	11.5	14.0

■ Tab Header

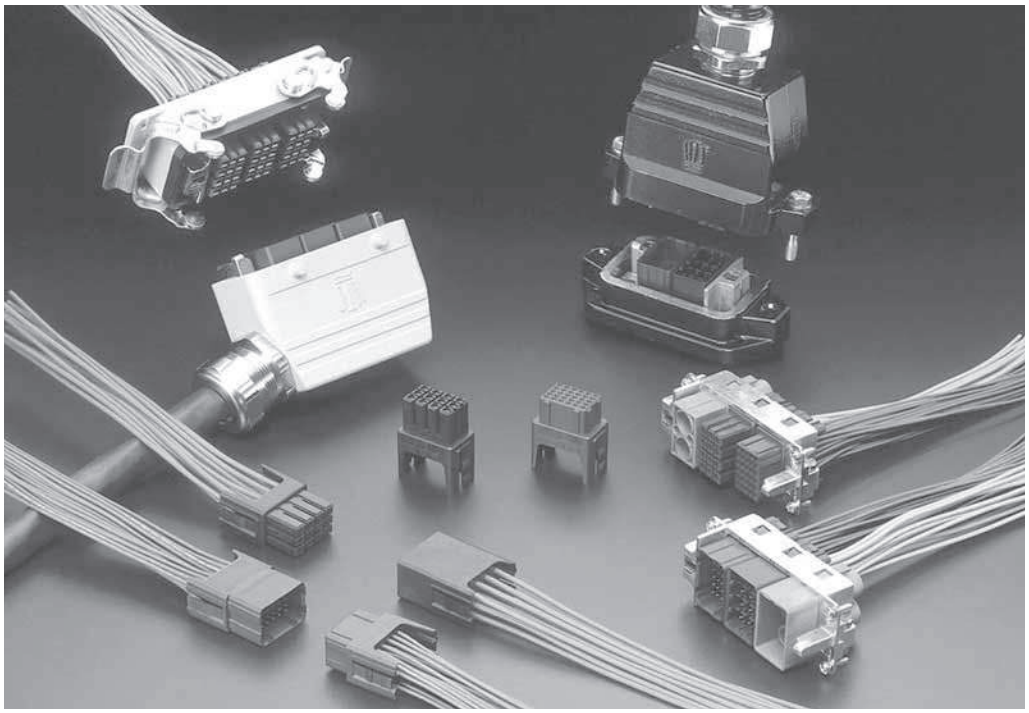


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
3	—	Gold	Black	5-1747145-3	28.8	27.0	17.5
4	—	Gold	Black	5-1747145-4	39.0	27.0	17.5
5	—	Gold	Black	1-1747145-5	28.8	27.0	17.5
7	—	Gold	Black	1-1747145-7	39.0	27.0	17.5

Note: All Part Numbers are RoHS compliant.

Dynamic HTS Module

Dynamic connector developed for applications that need heavy duty waterproofing. Now it is possible to use Dynamic series connectors for everything inside and outside the control board.



Performance Specifications

Item \ Series	D-2800	D-3800	D-4800	D-5800
Voltage Rating	250VAC/DC	600VAC/DC	600VAC/DC	630VAC/DC
Current Rating	5A	15A	25A	40A
	(#18 AWG)	(#16 AWG)	(#12 AWG)	(#8 AWG)
Contact Resistance	10mΩ Max. (Final)			2mΩ Max.
Dielectric Withstanding Voltage	1,500V AC (1 minute)		2,500V AC (1 minute)	3,000V AC (1 minute)
Operating Temperature	−55˚C~+105˚C			
Product Specification	108-78284	108-78285	108-78388	108-78389
Application Specification	114-5258	114-5148	114-5369	114-5206

Material and Finish

Description	Material	Finish
Receptacle Contact Tab Contact	Phosphor bronze or Copper alloy	Gold plated with under-plated Nickel (0.38μm)
Housing	UL94V-0, Grass filled thermoplastic polyester (PBT)	

Contact

Contacts of proven Dynamic series, as well as the existing special tools and applicators, can be continued to be used.

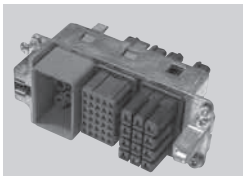
D-2 Contact Refer to P.365
D-3 Contact Refer to P.375
D-4 Contact Refer to P.402
D-5 Contact Refer to P.409

Dynamic HTS Module

This series is a combined product of HTS series proven with rectangular connectors and popular Dynamic series.

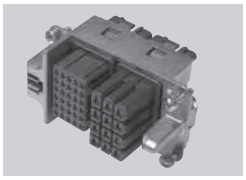
Feature 1 Possible to use existing Dynamic contacts
The same tried-and-true Dynamic series connectors are used as is, so existing specialized tools and applicators can also be used.

Feature 2 Wide variety of variations when combined
Metal hoods and frames of HTS connectors, which offers variable choices depending on sizes and mounting types, are employed. Sizes and number of positions can be freely selected to meet the needs. It is also durable for high-current with which the existing Dynamic series can not cope, by combined with the existing HTS series.



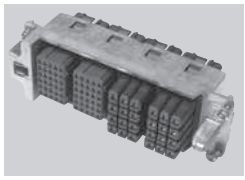
Both Dynamic and HTS combined

1 module type



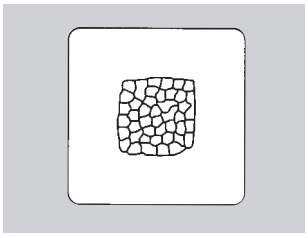
2 module type

3 module type

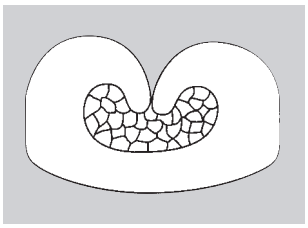


4 module type

Feature 3 Reduce assembly steps
Sequential terminals are available to enable the termination with automatic crimping machines.
Termination time can be substantially reduced.

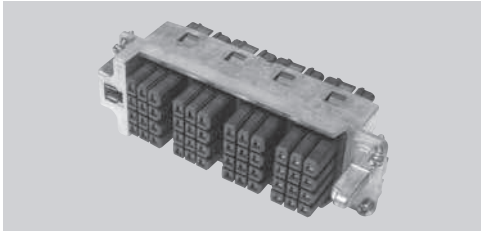


Productivity is poor because wires are inserted in terminal hole and crimped

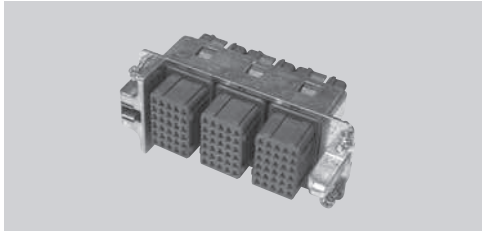


Productivity is good because wires are placed from above. Plus, there are consecutive terminals so automated crimping is possible

Feature 4 High density mounting possible
Approximately 30% higher density mounting is possible compared to the high density type of the existing HTS connectors.



D-3000 4 module type 48 Pos.



D-2000 3 module type 90 Pos.

Dynamic HTS Module

Connector selection procedure

Step 1

Decide current and number of positions

Step 2

Decide size of wires

Step 3

Select contact and housing

Step 4

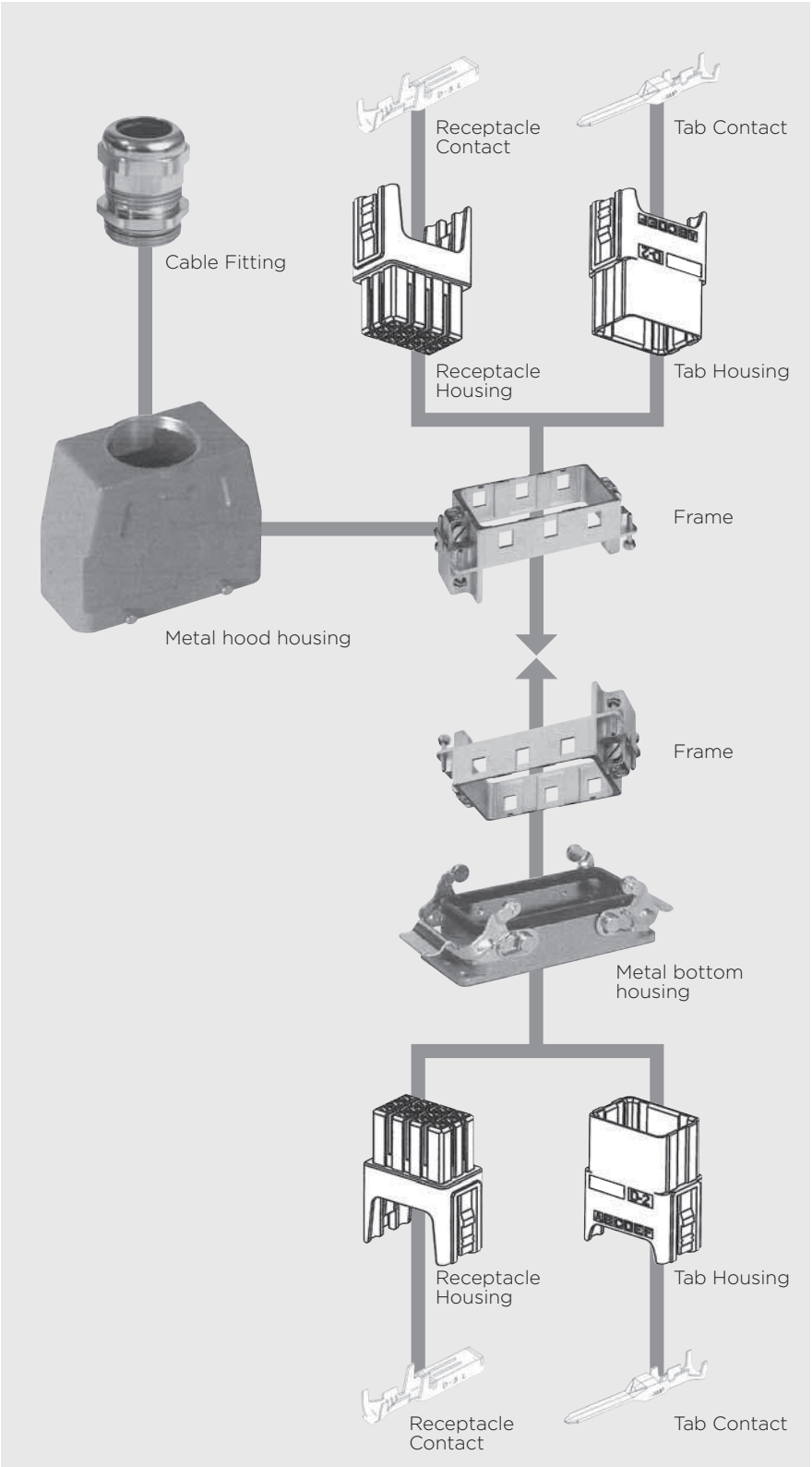
Select frame

Step 5

Select cable fit (screw)

Step 6

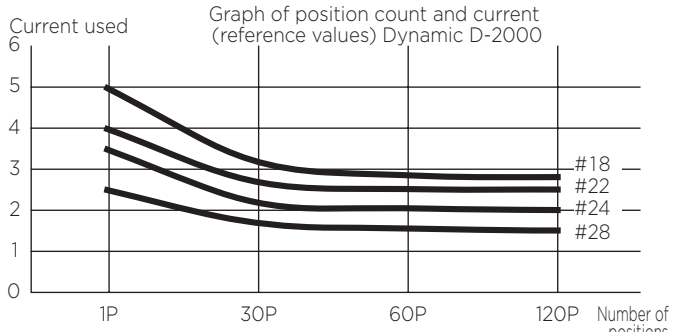
Select metal housing

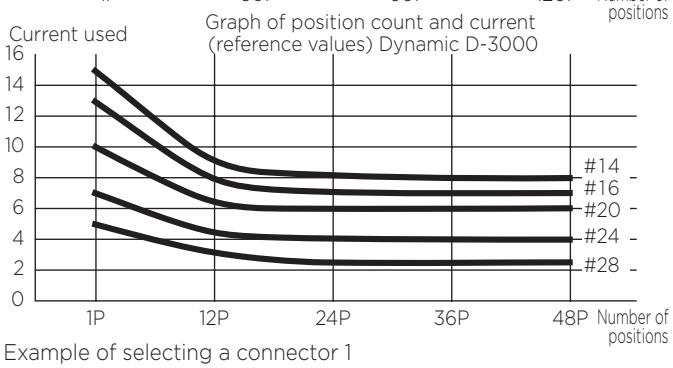


Dynamic HTS Module

Example of selecting a connector

Step1 **Step2** Refer to the following graphs to select the amperage, number of positions, and wire size.



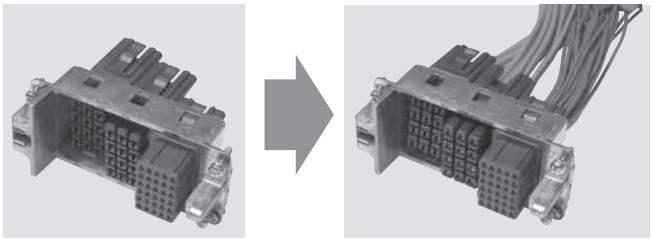


Example of selecting a connector 1

This example describes how to select connectors for; 8 amperes at 20 positions and 3 amperes at 20 positions. We can see from the graph above that the D-3000 #16 is sufficient for 8 amps x 20, and the D-2000 #18 is sufficient for 3 amperes x 20. (Refer to page 365 and 375 for the contacts)
D-2000 contact: 1318105-1, 1318109-1
D-3000 contact: 917484-☐, 917485-☐

Step3 **Step4**

Next, we select the Dynamic housing (see pages 426 and 427) and frame (see page 428) to support the connector and position count that we selected.

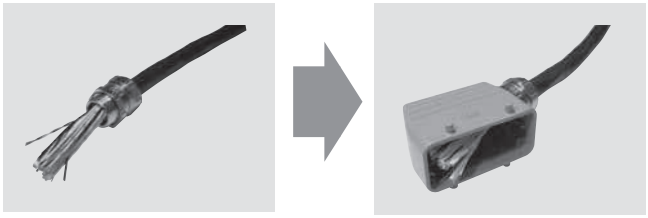


Example of selecting a connector 2

We can see that for the specifications we selected for example 1 we need 2 sets of D-3000 housing and 1 set of D-2000 housing (select from page 426 and 427). A total of 3 sets are necessary, so we select a 3-module type frame (select from page 428).
D-2000 housing: 1747365-1, 1747366-1 one each
D-3000 housing: 1747363-1, 1747364-1 two each
Frame for 3 modules: 1108782-1, 1108782-2 one each

Step5

Select a cable fitting (see page 429) that is suitable for the thickness of the jacket cable being used.



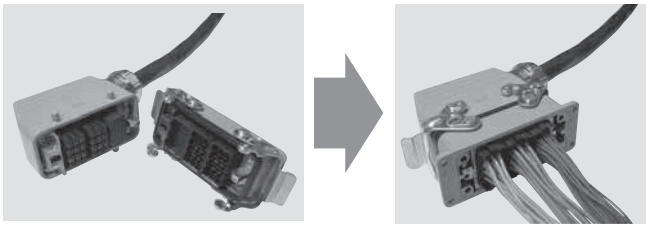
Example of selecting a connector 3

Assume ϕ 21 mm diameter jacket cable for this example, then we determine from the Cable diameter table (Dmin & Dmax section) on page 429, that a suitable cable fitting is the G29 or M32 cable fitting, for metal types.
This time we select the M32 type.
M32 cable fitting: 3-1102770-2 x 1

There are many cable fitting options available. Refer to the HTS catalog (889745 Rev.01-05) for options not listed in this catalog.

Step6

Finally, refer to the HTS catalog (889745-2 Rev.09-08) to select a metal case of the same size as the frame and the cable fitting you selected. At this point you can select from three shapes of locks for the metal case.
* Select a lock shape that is the same shape for the cable side and the mounted side that were selected.



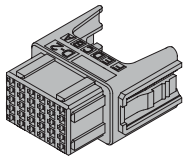
Example of selecting a connector 4

Select a metal housing for the parts that have been selected so far. From the HTS catalog, select a 3-module type (size 6) metal hood that can be attached to the M32 cable fitting. In this case, select a metal housing with dual side locks for wires that pull out horizontally. Select a bottom side metal housing that has the same kind of dual side locks. Finally, to finish, put all the parts selected so far into the metal housing.
Metal hood housing: 1106449-4
Metal bottom housing: 1-1102296-1

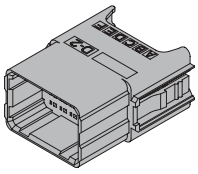
There are a wide variety of metal housings available, so refer to the HTS catalog (889745-2 Rev.09-08). The relevant page from the HTS catalog is shown on page 428 of this catalog.

Dynamic HTS Module

Part Number Chart



Receptacle Housing



Tab Housing

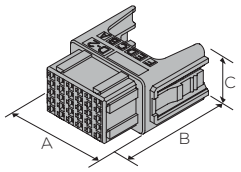
Board-mounting Tab Header
(Horizontal Type) (Vertical Type)

No. of Pos.	Color	Keying	Receptacle Housing	Plating	Tab Housing	Board-mounting Tab Header	
						Horizontal Type	Vertical Type
30	Black	—	1747365-1	—	1747366-1	—	—
12	Black	—	1747363-1	—	1747364-1	—	—
8	Black	—	1871416-1	—	1871417-1	—	—
4	Black	—	1871418-1	—	1871419-1	—	—

D-2800

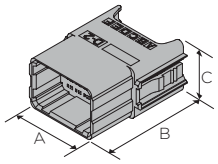
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
30	—	—	Black	1747365-1	30.3	37.6	19.5

■ Tab Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
30	—	—	Black	1747366-1	30.3	40.0	19.5

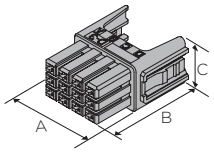
Note: All Part Numbers are RoHS compliant.

Dynamic HTS Module

D-3800

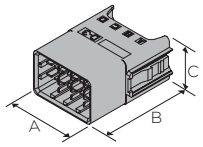
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	1747363-1	30.3	41.4	19.5

■ Tab Housing

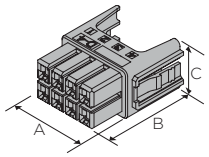


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
12	—	—	Black	1747364-1	30.3	40.0	19.5

D-4800

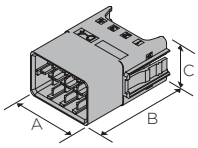
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
8	—	—	Black	1871416-1	30.3	38.6	19.5

■ Tab Housing

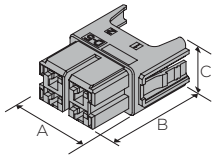


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
8	—	—	Black	1871417-1	30.3	40.0	19.5

D-5800

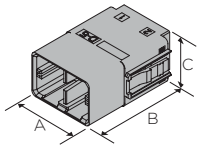
Dimensions

■ Receptacle Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1871418-1	30.3	41.4	19.5

■ Tab Housing



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
4	—	—	Black	1871419-1	30.3	44.1	19.5

Note: All Part Numbers are RoHS compliant.

Dynamic HTS Module

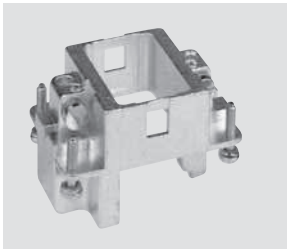
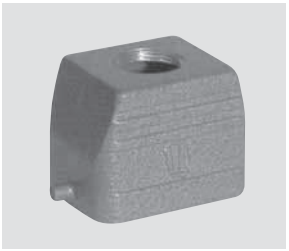
Frame and Metal Housing

Frame	Applicable Metal Housing

Refer to a HTS catalog No. 889745-2, Issued. 8-2008.

Size 3 (1 module type)

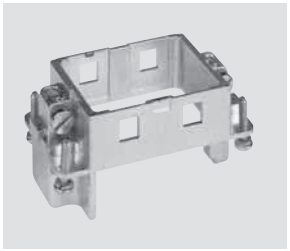
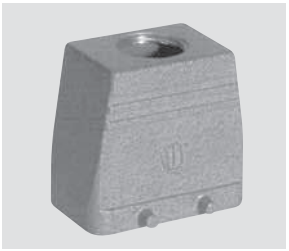
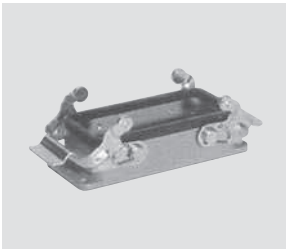
Part Number : 1108784-1
Hermaphroditic products

Refer to a HTS catalog No. 889745-2, P72-74.

Size 4 (2 module type)

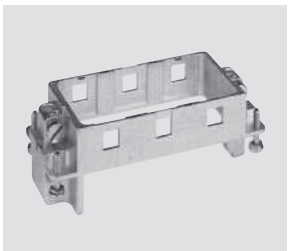
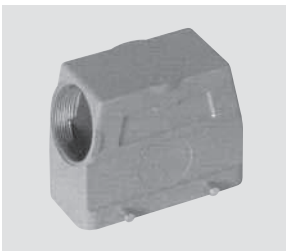
Part Number : 1108783-1 (Male)
1108783-2 (Female)

Refer to a HTS catalog No. 889745-2, P86-88.

Size 6 (3 module type)

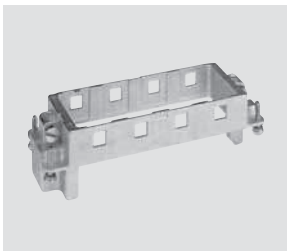
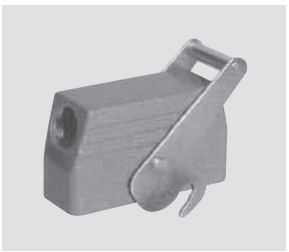
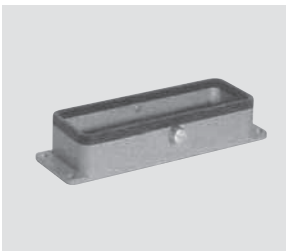
Part Number : 1108782-1 (Male)
1108782-2 (Female)

Refer to a HTS catalog No. 889745-2, P114-116.

Size 8 (4 module type)

Part Number : 1108780-1 (Male)
1108780-2 (Female)

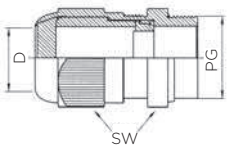
Refer to a HTS catalog No. 889745-2, P138-140.

Dynamic HTS Module

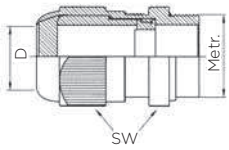
Cable Fitting

Plastic Type

Gland fitting IP 68 plastic



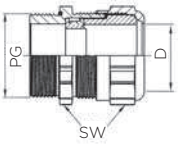
PG	D		SW	Designation	Part Number
	Min.	Max.			
11	5	10	22	HUT.11.P	1-1106005-7
13.5	6	12	24	HUT.13.P	2-1106005-7
16	10	14	27	HUT.16.P	3-1106005-7
21	13	18	33	HUT.21.P	4-1106005-7
29	18	25	42	HUT.29.P	5-1106005-7



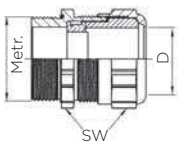
Metr.	D		SW	Designation	Part Number
	Min.	Max.			
M16	4	8	20	HUT.M16.P	1-1102771-6
M20	6	12	24	HUT.M20.P	2-1102771-0
M25	10	14	29	HUT.M25.P	2-1102771-5
M32	13	18	36	HUT.M32.P	3-1102771-2
M40	18	25	46	HUT.M40.P	4-1102771-0
M50	22	32	55	HUT.M50.P	5-1102771-0

Metal Type

Gland fitting IP 68 brass, Nickel plated, neoprene sealing insert and O ring at connection thread



PG	D		SW	Designation	Part Number
	Min	Max			
11	5	10	20	HUT.11.MS	1-1106006-9
13.5	6	12	22	HUT.13.MS	2-1106006-9
16	10	14	24	HUT.16.MS	3-1106006-9
21	13	18	30	HUT.21.MS	4-1106006-9
29	18	25	40	HUT.29.MS	5-1106006-9
36	22	32	50	HUT.36.MS	6-1106006-9
42	32	38	57	HUT.42.MS	7-1106006-9



Metr.	D		SW	Designation	Part Number
	Min	Max			
M16	5	10	17	HUT.M16.MS	1-1102770-6
M20	6	12	22	HUT.M20.MS	2-1102770-0
M25	13	18	27	HUT.M25.MS	2-1102770-5
M32	18	25	34	HUT.M32.MS	3-1102770-2
M40	22	32	43	HUT.M40.MS	4-1102770-0

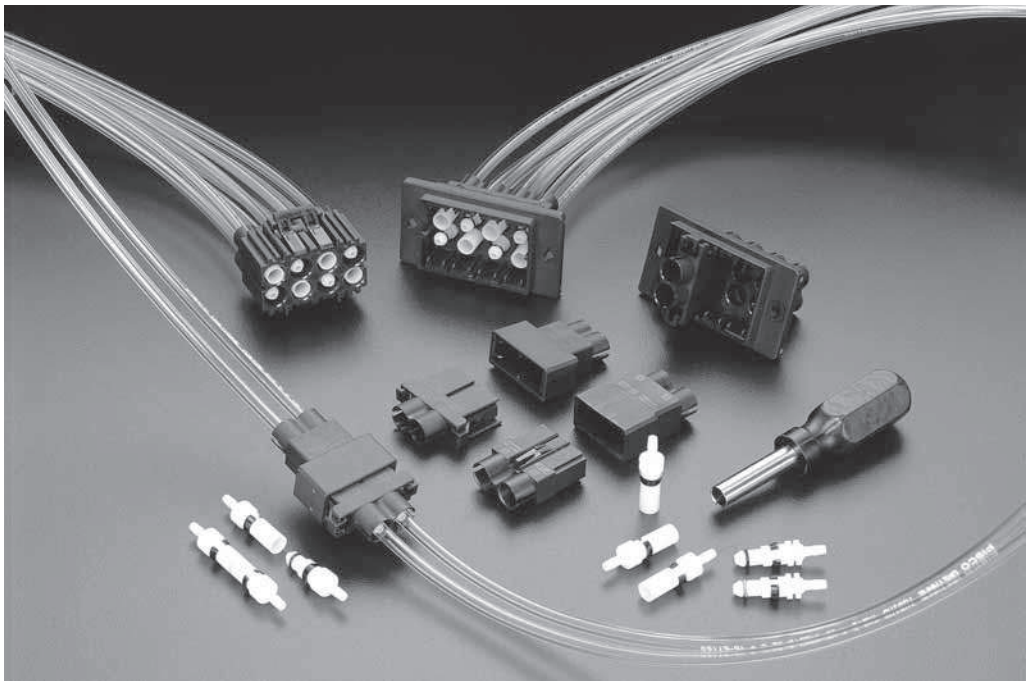
Variable options are available other than listed above. Please refer to P.188 to 193 of a HTS catalog.

Dynamic Series Connectors

Dynamic Pneumatic Connector

Series profile

Couplings are used in various ways in industrial equipment. Some large industrial equipment may use several thousand couplings in one piece of equipment.
However, we have heard from people on site about leaks caused by partially inserted tubes, leaks from damaged tubes, problems from misconnected tubes, time used on site for assembly, and other issues.
To solve these problems, we developed the Dynamic pneumatic connector.
We developed an air line connector that requires no special skills and can be assembled correctly by anyone. Plus it reduces time for designing and assembly on site where time constraints often result in misconnections during assembly.
These new connectors, a dramatic improvement to next generation air line connections, were produced through a joint development of contacts with another coupling manufacturer combined with our reliable Dynamic series housing.



Features

1. Two types of contact; resin or metal
The Dynamic pneumatic series has two types of materials for contacts, either resin or metal. You can select resin for applications that require lower cost and weight, or metal for high pressure and temperature environments.

2. Supports Ø4 or Ø6 tube
Two types of tube can be used, either Ø4 or Ø6. This diameter of tube is often used in industrial equipment.

3. Universal design
The housing consists of a plug and a cap, but the contacts can be placed in either one. It is also possible to create a keying function (to prevent misconnection) by varying the male and female contacts.

4. Modular housing construction
You can mate an 8P cap housing with an 8P plug housing, but a modular construction is possible because up to 4 pairs of 2P plug housings can be combined. This is perfect for air lines.

5. Maximum force of 1.0 MPa
Even though connector mating and demating is easy, a maximum pressure of 1.0 MPa is guaranteed. They can be used as replacements on the same line as normal couplings.

6. Two types of O-RING
Two types of seal materials are available for O rings, NBR and, for non-petroleum applications, FKM. Select FKM for clean-environment air lines.

Dynamic Series Connectors

Dynamic Pneumatic Connector

Performance Specifications

Item	Standard value	
	Resin contact	Metal contact
Applicable Medium	Air	Air / Water
Maximum Air Pressure	0.8MPa	1.0MPa
Effective cross section	3.14mm^2	8.80mm^2
Tube Holding Force	39.2N	39.2N (ϕ4)
		58.8N (ϕ6)
Durability	500 Cycles	
Insertion Force / Pin	9.8N Max.	
Extraction Force / Pin	9.8N Max.	
Temperature Range	0~60˚C (NBR)	
	0~105˚C (FKM)	
Applicable Tubes	O.D. : 4mm	OD. : 4, 6mm
	ID. : 2.5mm	ID. : 2.5, 4mm

Applicable Tube

Name of tube	Material
PN	Polyolefin
PFA	Fluororesin
Urethane	Polyurethane
Nylon	Nylon

Specifications and Instruction Sheets

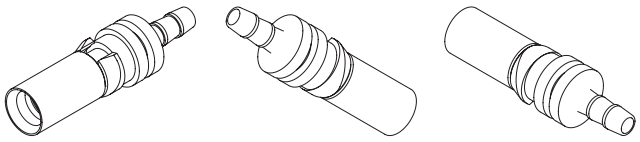
Product Specification	108-78406
Extraction Tool Model Number: 1999435-1	411-78240
Test Report	501-5782

Material and Finish

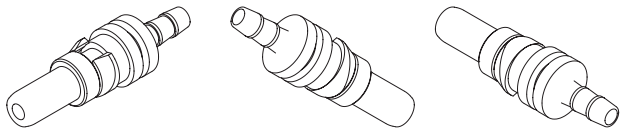
Description	Material
Resin contact	Polyacetal resin
Metal contact	Brass/nickel plating
Plastic Ring	Polyester resin
O Ring	Nitrite butadiene rubber (NBR)/ Fluorinated elastomer (FKM)
Housing	Fiberglass polyester (PBT), black UL94V-0

Part Number Chart

Socket contact



Pin contact



Diameter of tubes	Contact material	Socket contact	Pin contact	Extraction Tool
4	Resin	1903289-1*1	1903100-1*1	1999435-1
			1903100-2*2	
	Metal	2013714-1*1	2013716-1	
		2013714-2*2		
6	Metal	2013597-1*1	2013599-1	
		2013597-2*2		

O-rings are placed on the pin contact of resin contacts, and on the socket contact of metal contacts.
All of the contacts can be used in all of the housings.

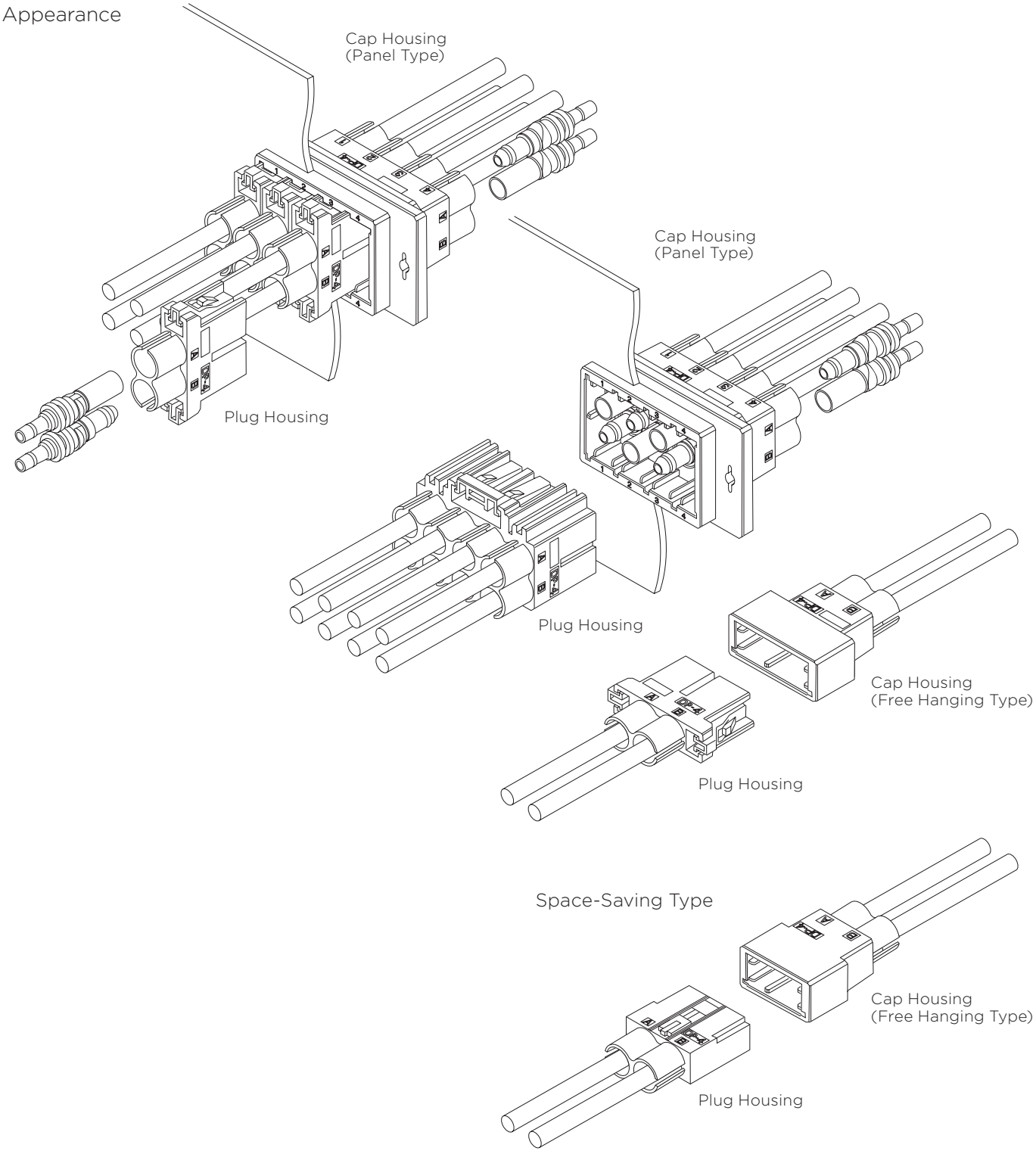
*1 O-ring material is NBR.
*2 O-ring material is FKM.

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

Dynamic Pneumatic Connector

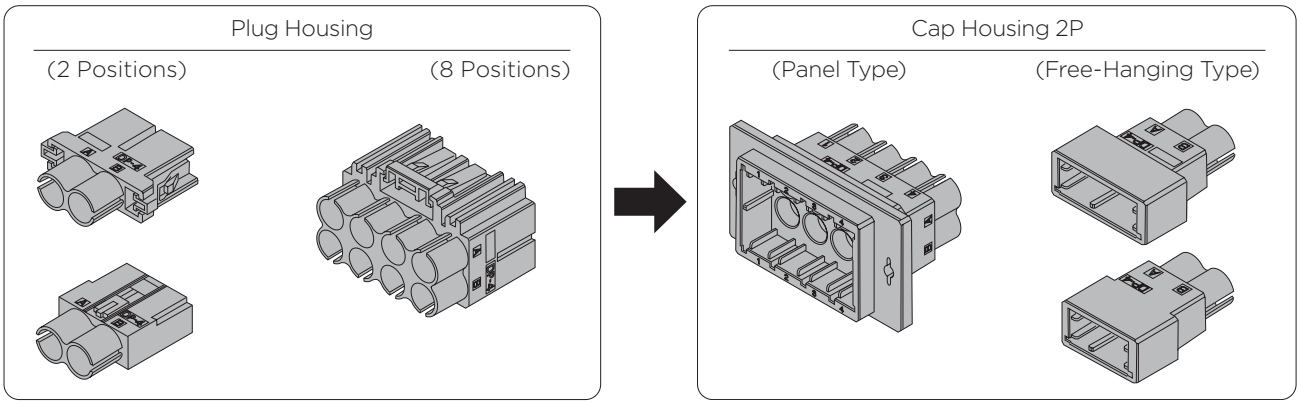
Appearance



Dynamic Series Connectors

Dynamic Pneumatic Connector

Part Number Chart



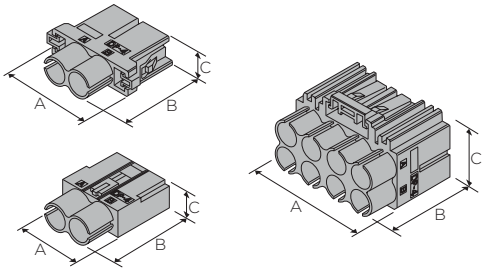
No. of Pos.	Plug Housing	Cap Housing	
		Panel Type	Free-Hanging Type
2	1903105-1	—	1903305-1
2	1981040-1	—	1981039-1
8	1903104-1	1903106-1	—

Information about related products

Applicable Contact ..... Refer to P.431
Performance Specifications ... Refer to P.431

Dimensions

■ Plug Housing (2 Positions)

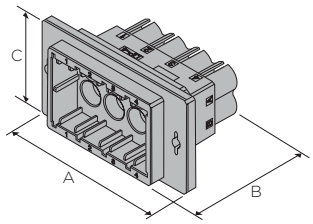


No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	—	—	Black	1903105-1	32.0	27.8	9.2
2	—	—	Black	1981040-1∗1	21.5	27.8	10.9
8	—	—	Black	1903104-1	37.7	27.8	31.3

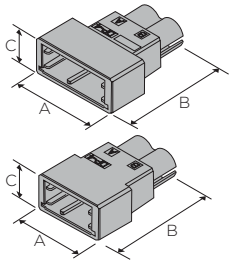
∗1 : Space-saving type

■ Cap Housing

Panel Type



Free-Hanging Type



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
2	—	—	Black	1903305-1	28.1	32.3	12.8
2	—	—	Black	1981039-1∗1	24.7	32.3	12.7
8	—	—	Black	1903106-1	58.9	32.3	32.1

∗1 : Space-saving type

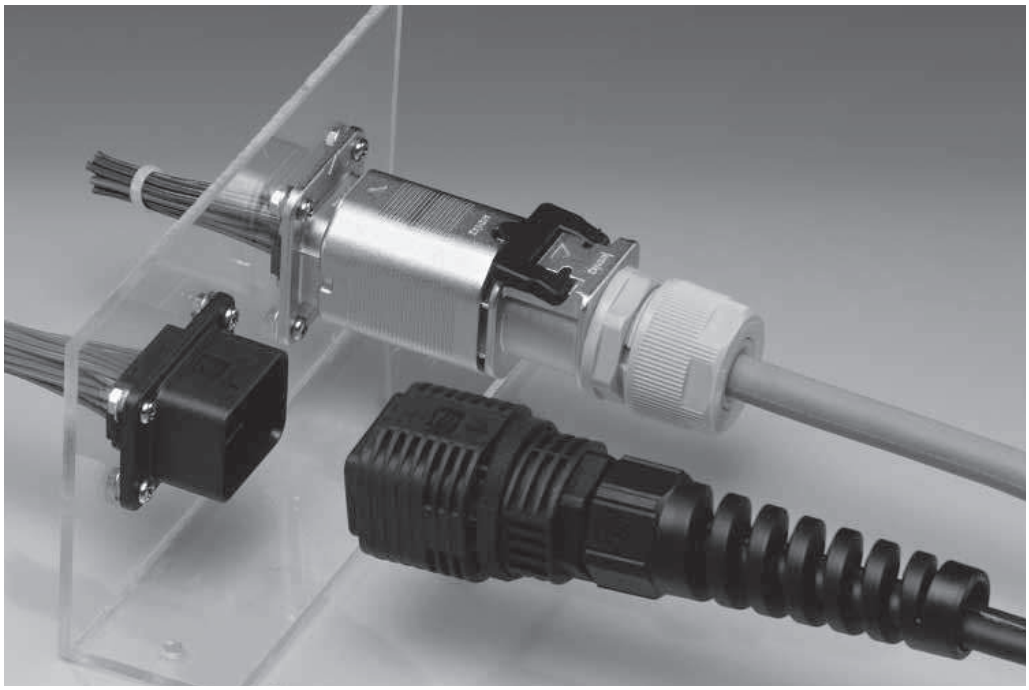
Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

Multiple Enclosure Connector

Series profile

Human machine interfaces (HMI) can be found on a variety of machines. They allow people to interface with equipment to control, operate, program and do other things. The multiple enclosure connector was developed as a connector for I/O interfaces for HMI. They have superior operability, are very safe, easy to use and there are many variations. Plus, they use Dynamic series contacts to give them very high reliability.
There are two types in the line up, metal and plastic, used according to the environment. You can make a selection based on your application.



Features

1. Wire sizes:
The metal type supports wires with a finished diameter of ϕ10 to 11 mm, the molded type from ϕ5 to 12 mm.

2. Applicable terminals
The highly reliable Dynamic D-1000 and D-3000 series terminals are used as contacts for I/O connectors for human machine interfaces (HMI). These can be crimped by using existing Dynamic crimping tools.

3. IP65 (molded type), IP67 (metal type) ingress protection.
The connectors have the dust and water-proofing for use in harsh conditions.

4. Safety lock mechanism
The lock mechanism uses the fast on/off lock concept which can be locked or released by just grabbing the connector. Plus, our proprietary double lock mechanism prevents vibration related disconnect accidents.

5. Two types of housing
The lineup includes two types of housing, a standard type and a reverse type for preventing exposure of live contacts.

6. Cable gland interface
Cable glands, which are commercially available and can be selected according to application and purpose, can be attached to cover the cable entering the connector.

7. Other considerations
Safety caps with a definite locking sound to confirm connections are also available.

Dynamic Series Connectors

Multiple Enclosure Connector

Performance Specifications

Item	Specifications
Current Rating	See item on the right
Voltage Rating	125VACrms (2-mm pitch products)
Dielectric Withstanding Voltage	1000VAC (1 minute)
Operating Temperature	−30˚C~105˚C (Including temperature increase due to charging)
Contact Resistance	10 mΩ (initial) Max
Insulation resistance	1,000MΩ (initial) Min
Insertion Force	39.2N Max. (per position)
Extraction Force	4.9N Min. (per position)
Durability	50 Cycles
Housing Look Strength	98 N Min

Specifications and Instruction Sheets

Molded type

Product Specification	108-78417
Application Specification	114-5377
Instruction Sheet	411-78293 (32P)

Contact

Refer to D-1000, D-3000

Storage housing

Molded type

Contact	Receptacle Contact/Tab Contact				
Wire Size / No. of Pos.	AWG #22	AWG #24	AWG #26	AWG #28	AWG #30
32Pos	1.5	1	0.8	0.5	0.5

Material and Finish

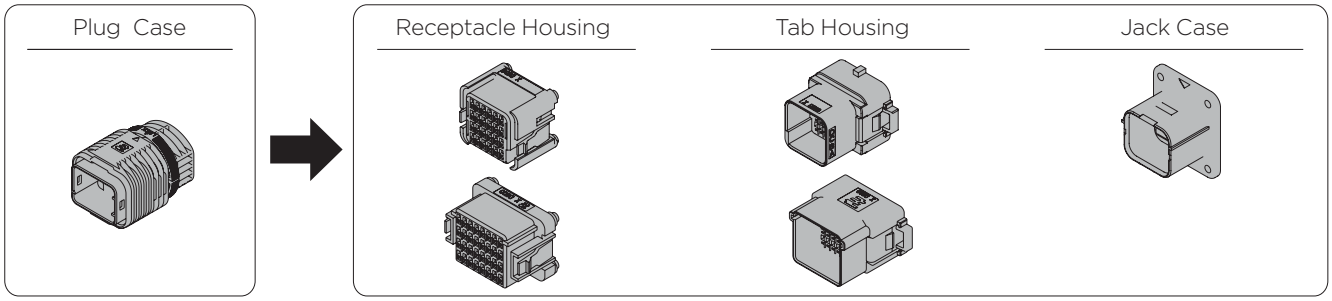
Molded type

Description	Material	Finish
Contact	Copper alloy	Gold plated with under-plated Nickel
Connector housing	UL 94V-0, Glass filled thermoplas polyester (PBT)	—
Connector case	UL 94V-0, Glass filled thermoplas polyester (PBT)	—
Packing	Nitrile butadiene rubber	—

Dynamic Series Connectors

Multiple Enclosure Connector

Part Number Chart / Outside Diameter



	Plug Case		Housing		Jack Case
			Receptacle (R) / Tab (T)		
32	1981919-1	Standard	1981921-1 (R)	1981914-1 (T)	1981913-1
		Reverse	2013393-1 (T)	2013391-1 (R)	

Shield Clip P/N. 1939851-1 (Use: Plug Case) Tool: 1891820-1 (411-78273)

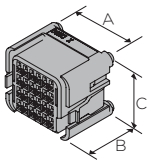
Information about related products

Applicable Contact ....32 positions: D-1000 series, page 351

Dimensions

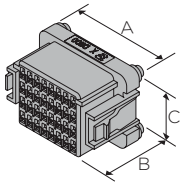
■ Receptacle Housing

Standard (Plug Case)



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
32	—	—	Black	1981921-1	27.2	15.3	17.6

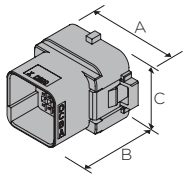
Reverse (Jack Case)



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
32	—	—	Black	2013391-1	29.5	23.0	17.0

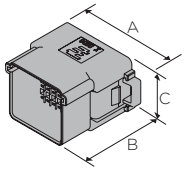
■ Tab Housing

Standard (Jack Case)



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
32	—	—	Black	1981914-1	29.5	22.3	17.0

Reverse (Plug Case)



No. of Pos.	Keying	Plating	Color	Part Number	Dimensions		
					A	B	C
32	—	—	Black	2013393-1	27.2	20.0	17.6

Note: All Part Numbers are RoHS compliant.

Dynamic Series Connectors

Application Tooling

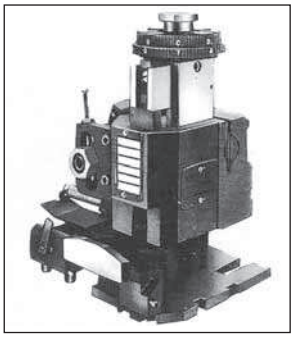
■ AMP-3K/AMP-5K
(Bench-type Terminator)

AMP-3K/AMP-5K are compact and low priced bench-type terminators. Both of them use a direct drive DC motor ensuring low noise and easy adjustment of the motor speed.
In addition, a range of options for various terminating works are available to provide an excellent working environment where anyone can perform terminating works with ease.

- Applicators of other makers can easily be mounted.
- The adjustment of the crimp height can be done by 0.013mm step with one touch operation.
- Applicable power supplies are AC100V~240V.
- A direct drive DC motor ensures low noise and easy adjustment of the motor speed.
- Various kinds of options to meet needs of your working environment are available.

Crimping capacity :
AMP-3K 13,300N (1.4t)
AMP-5K 22,200N (2.3t)

Description	Part No.	
	AMP-3K	AMP-5K
Universal Mount Type	1725950-3	1725900-3
AMP Quick Mount Type	1-1725950-2	1-1725900-2



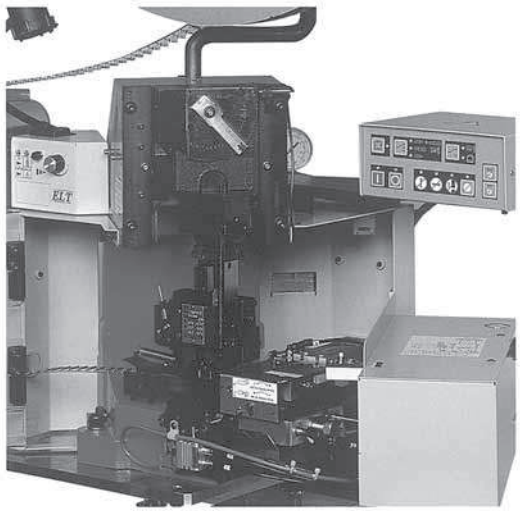
Mini-Applicator

Part Number : Refer to P.351, P.365, P.375, P.402, P.409, P.418

■ Stripper Crimper Machine
(Bench-type terminator)

- It is SCM in which the desorption of an applicators is possible. It is the best for terminal processing of a jacket cable, and the work of can be possible of strip + crimp by pressure a strip, and only crimp by pressure of selection possible in one-touch.
- Applicable wire : AWG28-14
- Maximum covering outer diameter : 5.08mm
- Jacket strip size : 29mm
- Strip length : 2.5-10mm

Machine body Part Number : 1596509-3 (AMP-3K)
Machine body Part Number : 1596509-4 (AMP-5K)
For Mini-Applicators, contact our Sales Department.



Dynamic Series Connectors

Application Tooling

■ Hand Tool PEW 12, D-3000, D-4000 Series

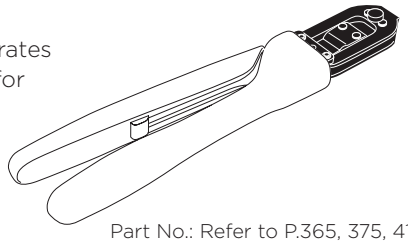
Part Number - Base Hand Tool : 9-1478240-0

※ When ordering, tell us only the handle and die part numbers.

- Crimping with a straight action feel
  By manipulating the fulcrum of the handle, we have created a crimper that, while double action, is almost like straight action.
- Interchangeable dies
  The dies are easy to change. This means a wide variety of terminals can be handled with the minimum number of tools.
- Improve work efficiency
  Contact series, wire sizes and crimp heights printed on work surface of dies.
- Lower cost than existing specialized tools
  The superior functionality you want, at a price you like.

■ Hand Tools CERTI-CRIMP Ⅱ, D-2000 Series, D-3000 Series, D-5000 Series

The crimping section incorporates Straight Action construction for improved reliability as with automachine.

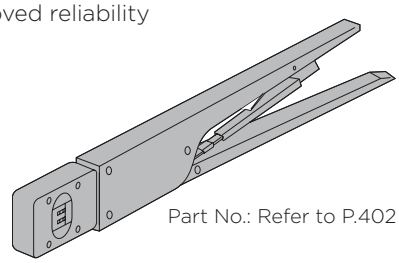


Part No.: Refer to P.365, 375, 418

●Handles are completely covered urethane to be easy to grip and gentle to workers' hands. ●Wire ranges and crimping height control values are printed on the crimping head for easy confirmation while working. Also, the ratchet in the handle keeps crimping quality very consistent. ●Hand crimping tool with wire stripper that has four variations, while the previous model had only three variations. ●We recommend periodic maintenance when using hand crimping tools to keep crimping quality consistent.

■ Hand Tools D-4000 Series

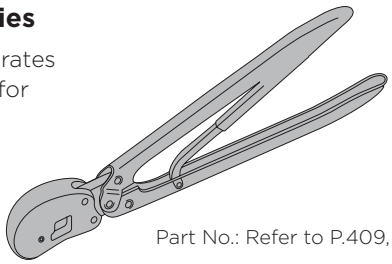
The crimping section incorporates Straight Action construction for improved reliability as with automachine.



Part No.: Refer to P.402

■ Hand Tools D-5000 Series

The crimping section incorporates Straight Action construction for improved reliability as with automachine.



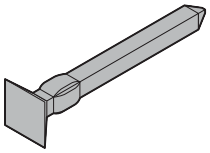
Part No.: Refer to P.409, 418

Dynamic Series Connectors

Application Tooling

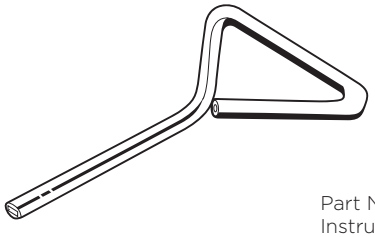
■ Keying Plug D-2000 Series

(used to prevent misinsertion)
Keying plug is used to preclude the possibility of contacts inserted in wrong directions when using connectors of the same size end-to-end.



Part Number: 641994-1

■ Tab Contact Cutting Tool D-2000 Series

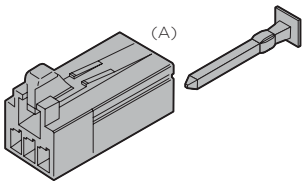


Part Number: 919041-2
Instruction Sheet: 411-78047

How To Use Plug and Tool

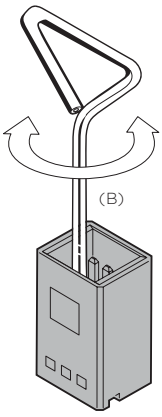
* Some of the products in this Series (D-2100S/D-2100D) are preloaded with keying plugs for preventing misinsertion.

① Insert a keying plug in one position of receptacle Housing.



② Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown.

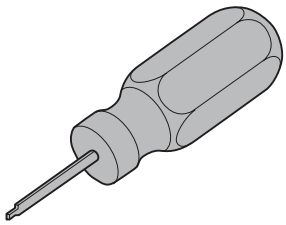
* For Tab housing (Panel/ Free- hanging Types), leaving Housing empty by not inserting a contact in one position.



■ Extraction Tool D-1000 Series

This extraction tool is used to extract D-1000 series contacts from their housings.

Part Number: 1891526-1
Instruction Sheet: 411-78241

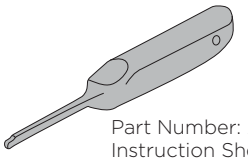


Dynamic Series Connectors

Application Tooling

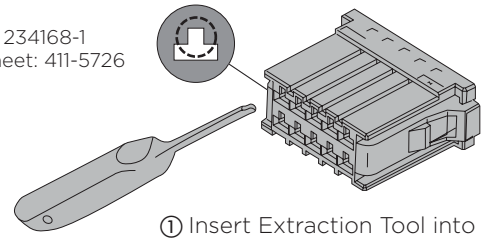
■ Extraction Tool D-3000 Series

This tool is used to extract contacts from wire-type tab/ receptacle housings.

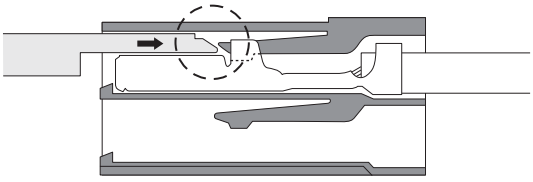


Part Number: 234168-1
Instruction Sheet: 411-5726

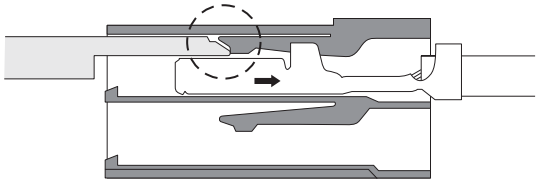
How To Use Extraction Tool



① Insert Extraction Tool into the narrow section of the upper convex cavity of housing in the direction as shown (Make sure the Tool's top and bottom in correct position.)



② The tip Extraction Tool lifts up housing lance, making contact free.

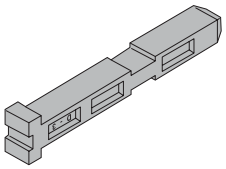


③ Contact can now be pulled out.

✻ Take care not insert into the Contact Section.
If you have inserted by error, replace the damaged contact with a new one before proceeding the work.

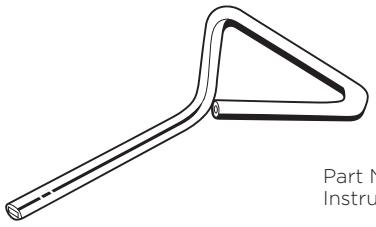
■ Keying Plug D-3000 Series

(used to prevent misinsertion)
Keying plug is used to preclude the possibility of contacts inserted in wrong directions when using connectors of the same size end-to-end.



Part Number: 175855-1

■ Tab Contact Cutting Tool D-3000 Series

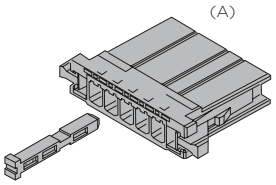


Part Number: 919041-1
Instruction Sheet: 411-78047

How To Use Plug and Tool D-3000 Series

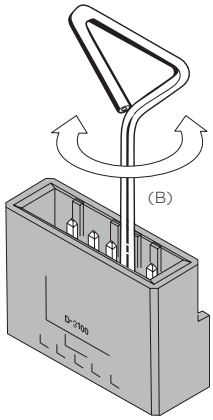
✻ Some of the products in this Series (D-3100S/D-3100M/D-3200S/ D-3200M) are preloaded with keying plugs for preventing misinsertion.

① Insert a keying plug in one position of receptacle Housing.

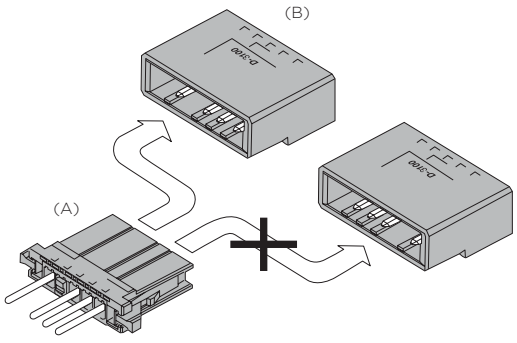


② Wrench off a tab in the corresponding position of mating Tab Header and empty that position. To wrench off the tab, insert Cutting Jig into its root and turn tool as shown.

✻ For Tab housing (Panel/ Free- hanging Types), leaving Housing empty by not inserting a contact in one position.



③ This being done, contacts cannot be inserted in wrong directions.



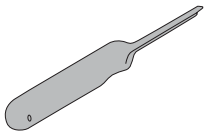
Dynamic Series Connectors

Application Tooling

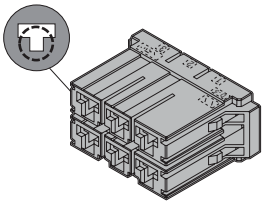
■ Extraction Tool D-5000 Series

- Used to extract contacts from wire type tab / receptacle housing.
  (Take care when inserting tool as the lance section of D-5 is turned upside down to that of D-3.)
- With D-5 contacts only, it is possible to extract using a small-sized slotted screwdriver or something like eyeleteer.

Part Number: 409158-1
Instruction Sheet: 411-5774

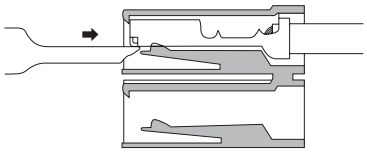


How To Use
Extraction Tool

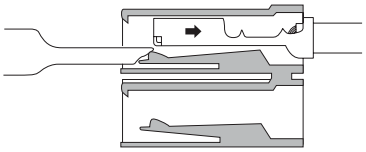


① Holding Insert Extraction Tool in the direction as shown, insert into the narrow lower section of Housing's reverse convex hole. (make sure that you are holding tool in proper position, top and bottom.)

When Useing D-5
Extraction Tool

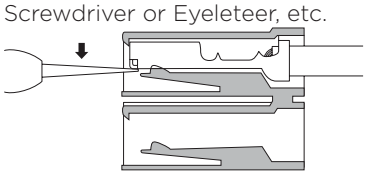


② The tip of Extraction Tool depresses housing lance, letting contact free.

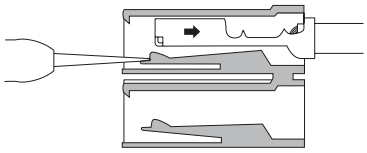


③ Contact can now be pulled out.

When Useing Slotted
Screwdriver or Eyeleteer, etc.



② When you butt the tip of tool at lance section and depress it, contact is released free.



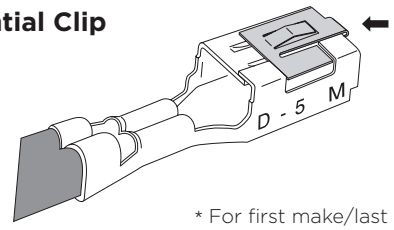
③ Contact can be pulled out.

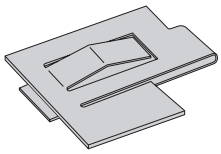
* Take care not to insert tool into contact section. If you've inserted by error, replace the contact with a new one before proceeding the work.

■ Crimping Oil

Part Number: 939691-1
Oil to prevent tool and contact from jamming during crimping.

■ Sequential Clip





Part Number: 179993-1

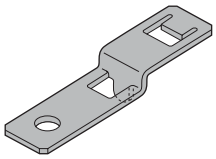
* For first make/last break

Dynamic Series Connectors

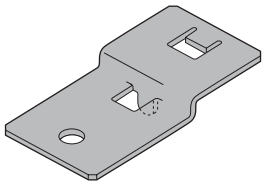
Connector Mounting Hardware

■ L Fittings

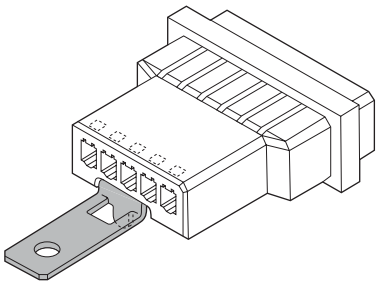
Used to secure free-hanging type tab housings onto panels.
Two styles, large and small, are available, the former for large-sizes housings and the latter for small housings.
Applicable housings are spesified in the table of housings.
5900121-2 (S)
5900121-4 (L)



Part Number: 5900121-2 (S)

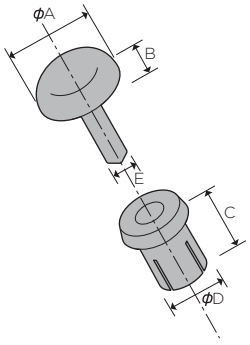


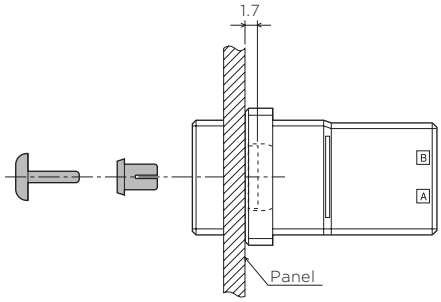
Part Number: 5900121-4 (L)

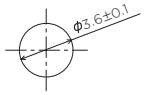


■ Push Rivets D-3000

Used to secure panel-type tab housings onto panels (Use as a handy mounting hard ware. Cannot be used with larger sized housings or those that are frequently inserted and withdrawn).







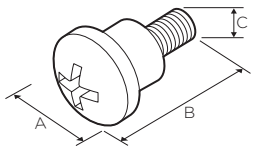
Recommended panel hole dimension

Part Number	Panel Thickness	Dimensions					Insertion Force	Retention Force
		A	B	C	D	E		
900128-1	0.3~1.3	6.4	1.6	4.5	3.5	1.95	19.6N~29.4N	127.4N Min.
900128-2	1.3~2.3	6.4	1.6	5.5	3.5	1.95	19.6N~29.4N	127.4N Min.

When 2push rivets are used.

Panel Mounting Screw D-2000, D-3000

Part Number	Dimensions		
	A	B	C
900167-1	9.0	10.3	M3



Panel Mounting Screw D-2000

Part Number	Dimensions		
	A	B	C
1376059-1	5.5	12.3	M3